REVISION OF THE NEOTROPICAL GENUS *POECILOXESTIA* LANE 1965 (COLEOPTERA: CERAMBYCIDAE)

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ABSTRACT

Poeciloxestia Lane 1965, (Cerambycini) was originally proposed for *P. melzeri* Lane (type-species) and *P. paraensis* Lane. This study expands *Poeciloxestia* to include 16 additional taxa. The current taxonomic status of related genera is discussed. A brief historical account of the genus and a key to species are presented, adult morphology is discussed, all taxa are fully described and illustrated, and a hypothetical phylogeny is proposed. The following 8 species are described as new: *P. lanei, rugosicollis, parallela, minuta, hirsutiventris, carlyslei, travassossi,* and *lanceolata.* The following 8 species are new combinations in *Poeciloxestia: Coleoxestia ochrotaenia* Bates 1870, *sagittaria* Bates 1872, *dorsalis* Thomson 1860, *lateralis* Erichson 1874, *bivittata* Buquet 1852, *elegans* Gory 1833, *suturalis* Perty 1832 (revalidated), and *elegans signatipennis* Melzer 1923 (raised to full species). *Coleoxestia omega* Zajciw 1967 is placed as a subjective junior synonym of *P. bivittata* Buquet.

INTRODUCTION

The Neotropical Cerambycini are a much neglected and poorly understood group of beetles. Several species are known only by their type-specimens, and most well-known collections contain few specimens for study. Practically nothing is known of their ontogeny, due in part to the relatively long larval periods. Thus, knowledge of the holomorphology is presently limited to dried adult museum specimens. No revisional work has ever been published, even at generic level, except an attempt by Zajciw (1966) to identify the species under *Brasilianus* Jacobson. Present generic definitions are insufficient, and many older genera remain heterogeneous groupings of species.

The only sensible approach to the study of neotropical Cerambycini is to group closely related species, postulate their hypothetical phylogenies, and then arrange the tribal phylogeny, subject to corrections derived from subsequent investigations. The objective of the present study is to modify the original diagnosis of one such group, *Poeciloxestia* Lane, to create a homogeneous group of old and new species.

The species considered herein have been the object of some confusion among classical authors. White (1853) listed under *Xestia* the following: *elegans* Gory, *lateralis* Erichson, and *dorsalis* "Chevr. Coll.". Thomson (1860) described *Criodion dorsale* (previously a *nomen nudum)* and referred to *X. elegans, dorsalis, annulipes,* and *pictipes* which ". . . doivent etre rapportee a la troisieme division du *G. Criodion",* but he did not mention *Stenochorus suturalis* Perty, *Xestia lateralis* Erichson, or *Criodion bivittatum*

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Buquet. Bates (1870), after a few comments about *Xestia*, described *X. ochrotaenia* among other *Xestia sensu stricto,* and in 1872 he described *S. sagittaria.* Gemminger and Harold (1872) listed *annulipes* Buquet, *dorsale* Thomson, and *lateralis* Erichson under *Criodion,* and *elegans* Gory, *ochrotaenia* Bates, and *sagittaria* Bates under *Xestia.* Gahan (1892), dealing with Neotropical Cerambycini, stated: "The following species appearing under *Criodion* in the Munich Catalogue will be better placed in *Xestia,*" and listed *annulipes* Buquet, *bivittata* Buquet (which he synonymized with *suturalis* Perty), *corvina* Germar, *dorsalis* Thomson, and *pictipes* Newman, with the final comment, "The same remarks will, perhaps apply to other species." Aurivillius (1912) maintained Gahan's views, changing the preoccupied *Xestia* White 1853 (*Xestia* Huebner 1818, Lepidoptera) to *Coleoxestia.* Lane (1965) erected *Poeciloxestia* for 2 new species (*melzeri* and *paraensis),* comparing them only to *Coleoxestia sagittaria* Bates.

Material and Methods

Specimens studied belong to the collections listed below, preceded by their abbreviations (as used in the listings of "specimens examined" following each description), and were made available through direct or indirect loans.

AMNH—American Museum of Natural History, N.Y., USA
BM —British Museum (Natural History), London, UK
CIS —California Insect Survey, Berkeley, USA
CM —Carnegie Museum, Pittsburgh, Penn., USA
CS —Carlos Alberto Campos Seabra, private, Rio de Janeiro, Brazil
EF —Ernest Fuchs, private, Wien, Austria
FIOC —Fundaçao Instituto Oswaldo Cruz, Rio de Janeiro, Brazil
MNHN—Musee National d'Histoire Naturelle, Paris, France
MNHU—Museum fur Naturkunde, Humboldt University, Berlin, DDR
MNRJ —Museu Nacional, Rio de Janeiro, Brazil
USNM —National Museum of Natural History, Washington, D.C., USA
SP —Museu de Zoologia, Universidade de São Paulo, Brazil
SF —Sergio Augusto Fragoso, private, Rio de Janeiro, Brazil
TR —Thomas E. Rogers, private, Gainesville, Florida, USA

An important contribution was a collection of color slides taken by Pe. Jesus Santiago Moure (Dept. Zoology, Univ. Federal do Parana, Brazil), of type-specimens at different institutions over the world. These slides supplement the brief original descriptions when, for various reasons, the type specimens were not available.

In the dessication process, museum specimens exude a greasy substance which fixes dust particles, obliterating surface features from direct observation and photography. Ethyl and methyl alcohol, ethyl ether, acetone, hexane, benzene, xylene, household detergent and Barber's solution were used to remove adhesions with poor results. Chloroform immersion coupled with ultrasonic treatment yielded the best general cleaning, but in critical cases the foreign matter had to be removed laboriously with the aid of a fine needle and a brush dipped in chloroform. Fragments of pupal exuviae were frequently found in the recess of deep punctures, mesosterna, and metepisterna.

Descriptions follow a practical pattern, with the format designed to facilitate retrieval of morphological data. Systematized photographs of most characters, 12 for each species, are provided to permit direct comparison. The 3rd picture following the habitus of each species is an exception to this system, and usually shows a unique, distinguishing characteristic. These photomacrographs were taken in 35mm format, with a Nikon F2 camera, the great majority with a 55mm Micronikkor lens inverted

on a 27mm extension ring, and a few with a 40mm Zeiss Luminar adapted to a Nikon PB4 bellows. The illumination was provided by 3 high intensity 12 volt lamps (Tensor brand) for fill-in and an Olympus LSD microscope illuminator for modeling. Exposures at f-stops 8 to 11, half to a full second, were found satisfactory on Panatomic X film (emulsion 5060), developed in Microdol 1:3 for the recommended time and temperature. All prints were made on Kodak Polycontrast RC paper. The specimens were held by a Baush-Lomb bullet holder, the tip provided with a lump of odontological "utility wax." The holder permits omnidirectional movements, to bring into focus the entire feature, usually with curved shapes. The average time consumed by each photomacrograph was estimated at 45 minutes, from the mechanical cleaning to the final print, sequential steps collectively made on a 36 exposure film.

The morphological discussion under the generic diagnosis is partially illustrated with SEM photomicrographs, taken with a Cambridge Mark IIA Scanning Electron Microscope on Polaroid PN-55 film, the subjects coated with a 200-300 angstrons gold film in a Denton DV-502 High Vacuum Evaporator, at the Insect Attractants and Basic Biology Laboratory, USDA, Gainesville, Florida, with the assistance of Mrs. Thelma C. Carlysle.

Genitalia preparations were made by detaching the entire abdomen, boiling it in pure water for 10 minutes, extracting the genital apparatus by cutting the intersegmental membrane between the 7th and 8th sternite, replacing the remains of the abdomen in the specimen by gluing with colorless nail enamel, and submitting the genital parts to the usual treatment (KOH, water, acetic carmine, ethyl alcohol, camphored phenol, xylene, balsam).

The key is meant as an aid to identification, and should not be necessarily interpreted as reflecting phylogeny.

Every effort was made to keep the terminology simple, using generalized entomological terms wherever possible. Thus, *ancestral* is used instead of *plesiomorphic, derived* instead of *apomorphic, dorso-elytral* instead of "sutural", etc. Most morphological nouns are self-explanatory, as *fronto-axial* line, *post-humeral* area, etc., and are diagrammatically illustrated on plate I.

Taxonomic Account

Genus *Poeciloxestia* Lane 1965:269

Diagnosis: Head with eyes well-separated dorsally by ridgelike structure and without inter-ommatidial sensilla; bases of antennal socket tubercle separated by depressed line; fronto-axial line distinct and usually attaining post-clypeus or ending near it. Antennal segments 3-10 apically feebly bulbous, unarmed.

Prothorax not distinctly divided into pronotum and prosternum (i.e., without a dividing line or a markedly different sculpture). Pro- and mesintercoxal processes smoothed, not projecting.

Elytra of 2 colors, the darker over an ochraceous background forming 1) a dorso-longitudinal vitta with variable pattern and 2) a variable lateral vitta, sometimes confined to post-humeral area and raised margin.

Legs with femora flattened, sub-fusiform, apices rounded. Tibial apices angulose or rounded, never prolonged in an acute spine beyond tarsal insertion. Mesocoxal sockets open laterally.

Type species: *P. melzeri* Lane (1965:270), by original designation.

Remarks and morphological discussion: Distinct from *Coleoxestia* Aurivillius by the apically feeble bulbous antennal segments, non-clavate femora, open mesocoxal sockets; from *Criodion* Serville by the unarmed femoral and tibial apices; from *Sphallenum* Bates by the non-contiguous antennal tubercle socket bases, non-projecting intercoxal processes and open mesocoxal sockets.

The microstructure of the integument is formed by polygons, often hexagons, which are distorted in every conceivable way to form different exoskeletal features.

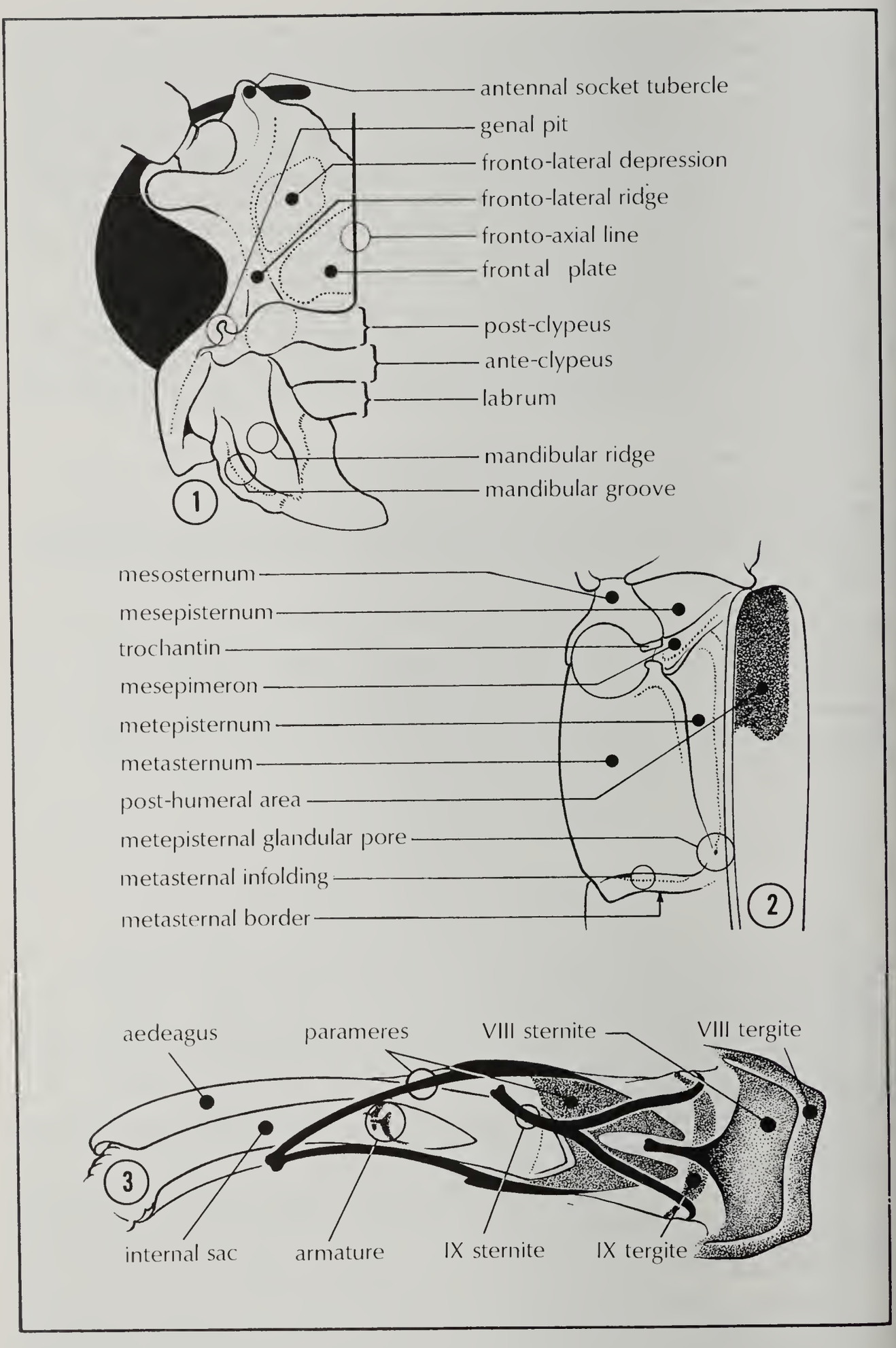

Fig. 1-3, *Poeciloxestia,* generalized and diagrammatic: 1) head; 2) meso- and metasternum; 3) male genitalia.

The most extreme distortion occurs in the stridulatory file of the mesoscutum (fig. 16 and 17), where the polygons are stretched gradually to form the file's teeth. These polygons have been found on "Thysanura and at least in some part of the body of every pterygote insect examined." (Hinton, 1970).

The head, along the fronto-axial line, folds and projects internally where muscles are attached. Over the fronto-lateral ridges, the line separating the frons from post-clypeus is always visible. This line contains 2 pits, genal (*fovea lateralis* of some authors) and frontal at each side of the fronto-lateral ridges, internally forming the anterior mandibular articulation. The genal pit occurs in *Poeciloxestia* sub-contiguous to the lower lobe of the eye (fig. 7) or separated from it (fig. 5). In all the closely related genera examined, the genal pit is present in only one of the above defined states (*Criodion* fig. 4, *Coleoxestia* fig. 6). The frontal pit is represented as a deep corner at the inner side of the fronto-lateral ridges in *Poeciloxestia,* as well as in *Criodion* and *Coleoxestia,* but never so prominent as in *Bothrocerambyx* Schwarzer, *Macrobrasilianus* Fragoso and *Brasilianus* Jacobson.

The post-clypeus is usually depressed medially, ridge-like or not; ante-clypeus somewhat transparent, yellowish. The labrum is folded inward (fig. 18), sometimes creased. The mandibles are variable, but never laminate, always grooved outward, more or less excavate near the labrum, bearing an antero-basal ridge (reduced and smoothed in *travassosi* n. sp.). The maxillary and labial palp distal segments vary in shape from sub-parallel to dilated and flattened, but never distinctly triangular as in *Brasilianus.* The mentum is usually folded inward, with a transverse depression.

The gular plate is narrow as compared to *Coleoxestia* (fig. 17 and 20), flush with head ventral surface, the punctures poorly defined.

The antennae are longer than the body in males (except in *travassosi* n. sp.), shorter in females, segments 3-10 feebly bulbous apically. The 3rd and usually 4th segment in 2 species (*lanei* n. sp. and *sagittaria* Bates) show a longitudinal sulcus without sensilla, not to be confused with other longitudinal depressions (reduced to spots in most proximal segments), that are termed *scars* These scars are areas where differentiated sensory structures are located (fig. 12 and 14), both dorsally and ventrally, and are best seen under tangent illumination. The shape of the differentiated sensilla of fig. 14 is essentially the same in *Poeciloxestia, Criodion,* and *Coleoxestia.* The 11th segment of males is usually almost twice the length of the 10th due to the fusion of an ancestral 12th, although the remaining fused part of the 12th may be drastically reduced (as in males of *travassosi* n. sp.; *minuta* n. sp. and, as a general rule, in females of all species). This fusion in most species left a more or less distinct constriction, but in *elegans* Gory an orifice can be seen (fig. 13 and 14).

The dark dorso-elytral vittae on lighter background is a common character among Neotropical Cerambycini, where it develops along the same general patterns in several genera, and is subject to inter- and intraspecific variation (remarkably so in *P. lanceolata* n. sp. and *P. dorsalis* Thomson).

The prosternum in a group of species is distinctly bulged anteriorly, a character not mentioned by previous authors and missing in all other taxa examined under the tribe. A semi-bulged state is present in *elegans* Gory and *signatipennis* Melzer, coupled with narrow elongated elytra.

The femora are flattened, apically rounded, unarmed, of the same general color of the integument, (*dorsalis* Thoms., *ochrotaenia* Bates, and *bivittata* Buquet show a lighter color), with darker tips, although not distinctly banded. Tibial apices are rounded or angulose (fig. 9) with a seriate row of micro-striated spicules (fig. 11), never prolonged beyond tarsal articulation in an acute spine.

Most visible meso- and metasternal sclerites are hemmed at borders and some overlapping of the mesepimeral border over the metepisternum always occurs. The metasternum is verrucose at posterior, more external border, where it supports the mesepimeron. Mesotrochantin usually visible, depending on the position of coxa. The metasternal infolding that partially forms the inner part of metacoxal transverse socket may or may not be connected to the thoraco-abdominal median junc-

tion by a sulcus. This connection appears more evident in *travassosi* n. sp. (fig. 21, where the abdomen has been removed).

The male 7th abdominal sternite may be deeply cut inward as in *melzeri* Lane, sinuous as in *dorsalis* Thoms., or truncate as in *paraensis* Lane. In females it is always broadly curved.

The male genitalia presents several problems as a taxonomic tool. To figure or describe them as an aid to identification seems pointless, as all species can be identified readily by other characters. To use it to establish relationships within the genera or the tribe requires an overall deep study of its intra- and inter specific variation, which could not be done in the present study. However, a few remarks can be made, with nomenclature graphically defined in fig. 3.

The 8th segment, always provided with a ventral apodeme, appears to be a species specific character, with small variation; its dorsal plate is usually wider than the ventral one, but the inverse is true at least in *dorsalis* Thoms., and *minuta* n. sp. The 9th tergite, ("arc dorsal" of Iuga, 1962-66) is always sclerotized and distinct. Sharp and Muir (1912), Ehara (1954), and Jeannel (1955) confined their study to the parameres/aedeagus complex. Iuga (1962-66) covered the subject more broadly, including the female ovipositor as compared to the male genitalia. The dorsal bilobed portion of the parameres ("tergite 9" of Iuga, 1962) shows considerable variation concerning the separation of its lobes in at least *dorsalis* Thoms.; a median, sclerotized lateral prolongation of the tergal portion, distinctly separated and sub-parallel to the ventral fork arms, was observed in *paraensis* Lane, *lanceolata* n. sp., *suturalis* Perty as well as in *Criodion tomentosum* Serville, while *melzeri* Lane, *dorsalis* Thoms., *minuta* n. sp. and *Coleoxestia spinipennis* (Serville) such prolongation is missing. The aedeagus ("segment 10" of Iuga, 1962) shows subtle apical differences with apices more or less pointed. The internal sac is extremely difficult to dissect from dried museum specimens, and no satisfactory technique has been developed to avoid its rupture. Fragments mounted in balsam in the usual way show different surface structures other than the sclerotized hooks proximal to aedeagus, present in all species examined. The female genitalia has not been investigated.

Hypothetical Phylogeny

Hypothetical phylogenies are inferred on the basis of characters existing in 2 or more states within a group. One of these states is termed ancestral (abbreviated "a"), and the other (or others in case of a phenocline) derived (abbreviated "d").

According to Ross (1974) there are 3 criteria to hypothetically infer the ancestrality of character states: 1) fossil sequences (unknown); 2) "in-group" comparisons; 3) "ex-group" comparisons or group trends. The shared or common character is taken as ancestral. In this study, "in-group" means comparisons within the bounds of *Poeciloxestia,* and "ex-group" means comparisons among other taxa in the tribe Cerambycini.

Position of *Poeciloxestia* among Neotropical Cerambycini: In spite of different criteria used by various authors to define or understand the genera under Cerambycini, 2 sub-groups can be recognized.

The first, and more ancestral, contains the genera *Bothrocerambyx* Schw., *Macrobrasilianus* Fragoso, *Brasilianus* Jacobs., and *Peruanus* Tippmann (elongate femora, apically armed antennal segments, frontal pits prominent). The strong similarities between *Brasilianus* Jacobs. and certain African species of *Plocaederus* Thomson suggest the direction of dispersal from Old World (where the Cerambycini has its largest number of species) to New World, through the former linkage between Africa and Eastern Brazil, believed (Wilson *et al.,* 1972) to have existed until the close of the Jurassic Period, some 140 million years ago.

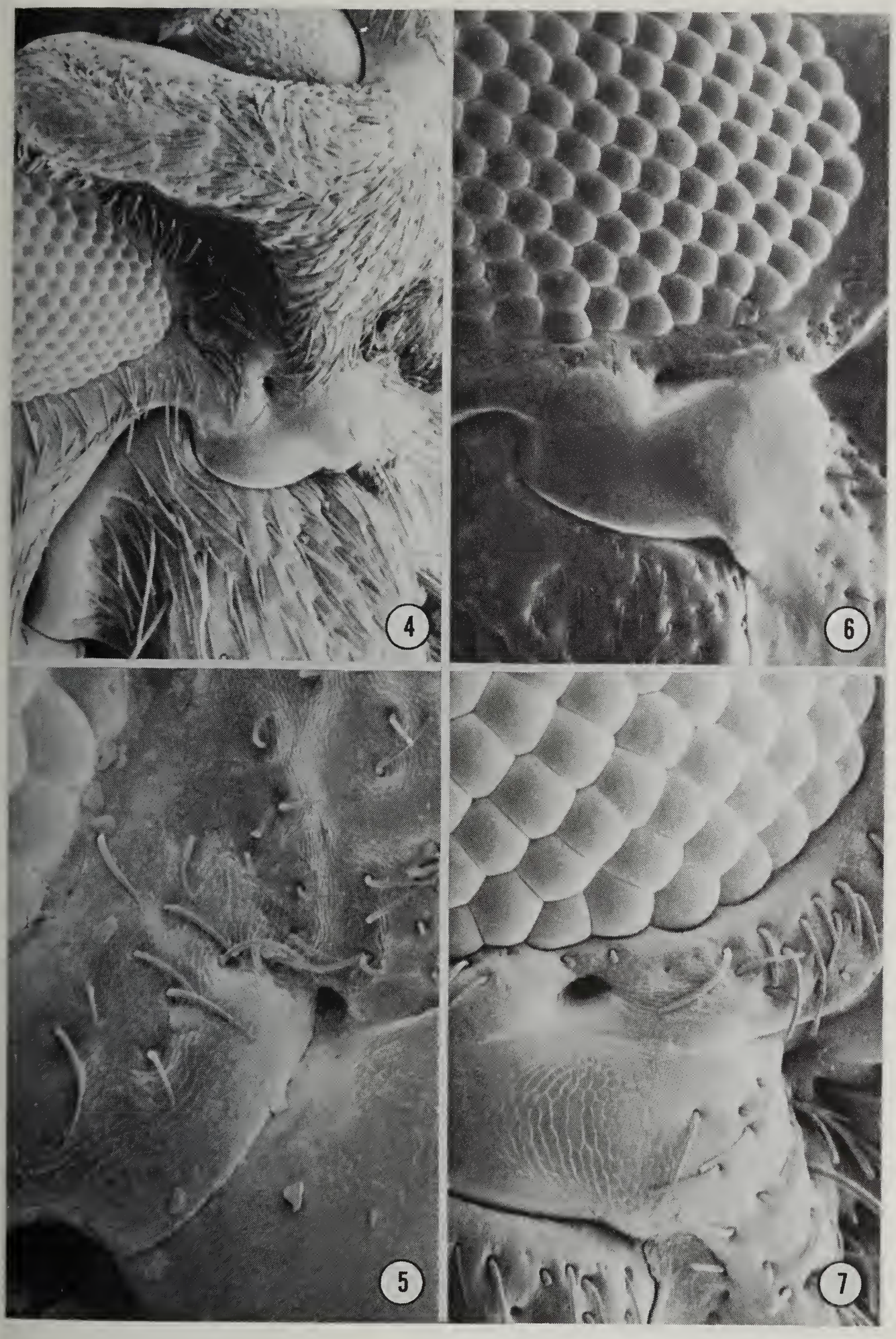

Fig. 4-7, Male genal pits (SEM photos): 4) *Criodion tomentosum* Serv. (25.7x); 5) *Poeciloxestia melzeri* Lane (117,8x); 6) *Coleoxestia spinipennis* (Serv.) (53.5x); *Poeciloxestia minuta* n. sp. (117.8x).

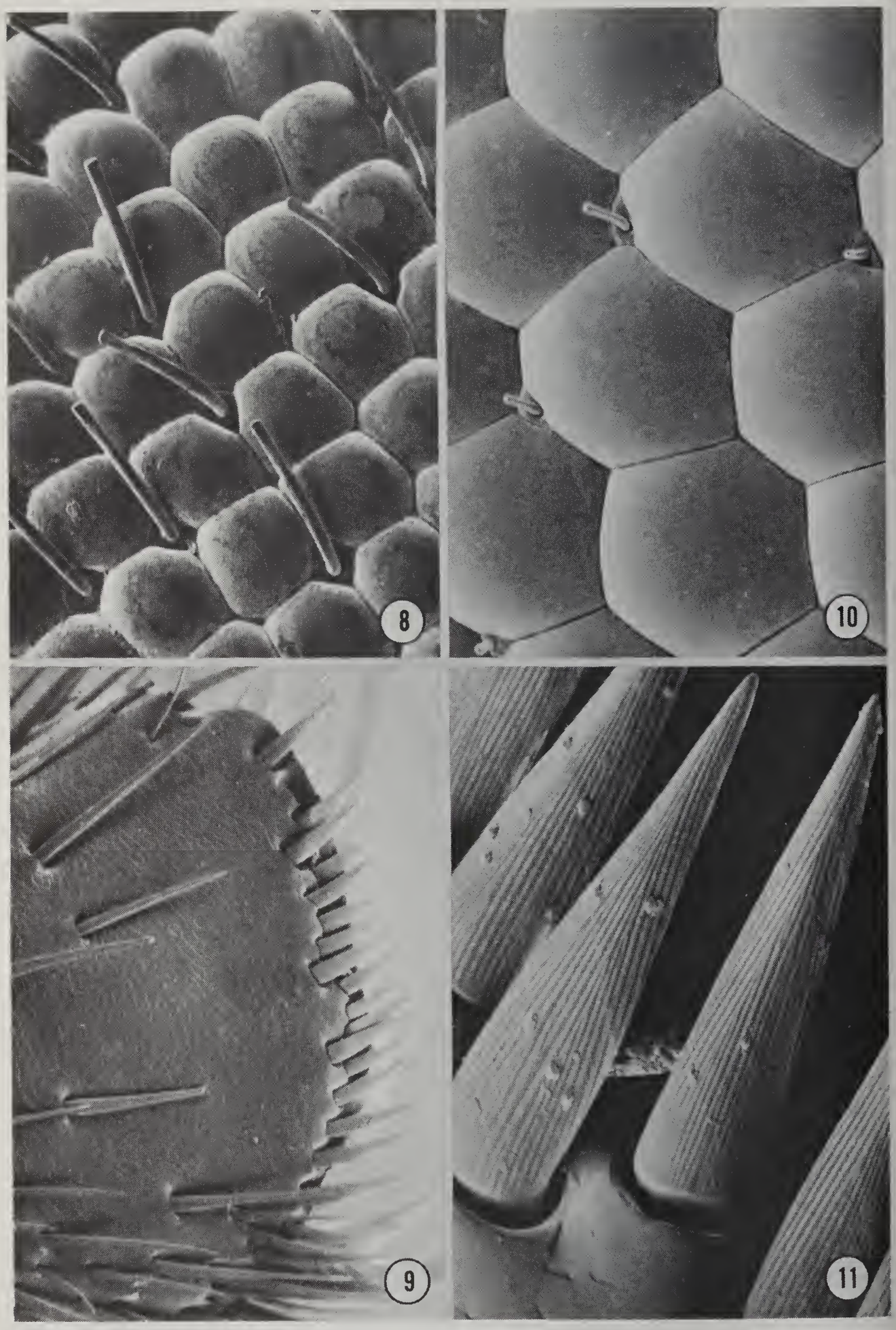

Fig. 8-11, Males (SEM photos): 8) *Criodion tomentosum* Serv., compound eye and sensilla (228.5x); 9) *Poeciloxestia minuta* n. sp., apex of mesotibia (228.5x); 10) *Coleoxestia spinipennis* (Serv.), compound eye and sensilla (214x); 11) *Poeciloxestia minuta* n. sp., apical spicules of mesotibia (817x).

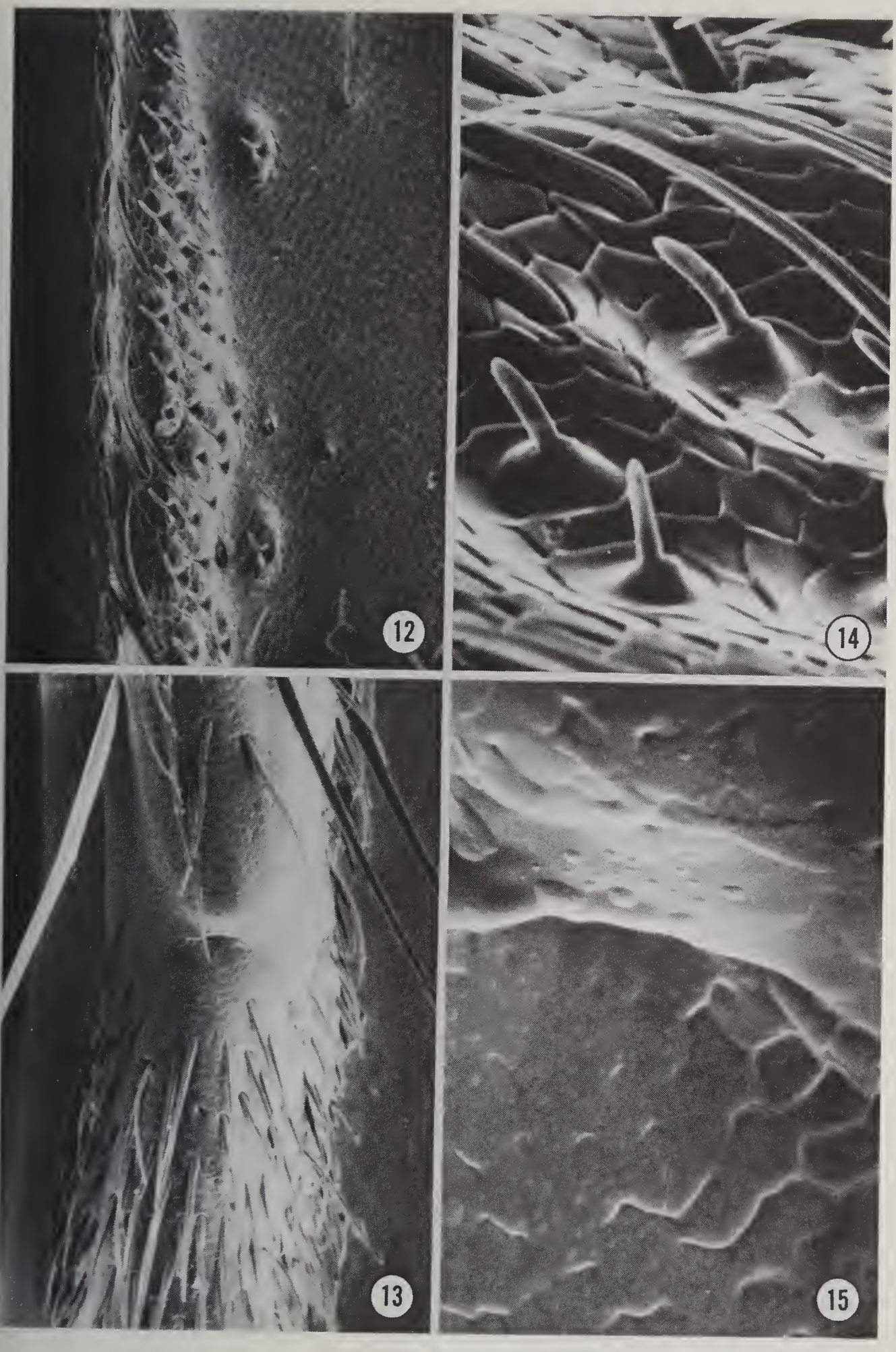

Fig. 12-15, *Poeciloxestia elegans* (Gory), antennal segments (SEM photos): 12) scar on 4th (228.5x); 13) fusion of 11th and 12th (153.5x); 14) scar on 4th (1143x); 15) fusion of 11th and 12th (1671.5x).

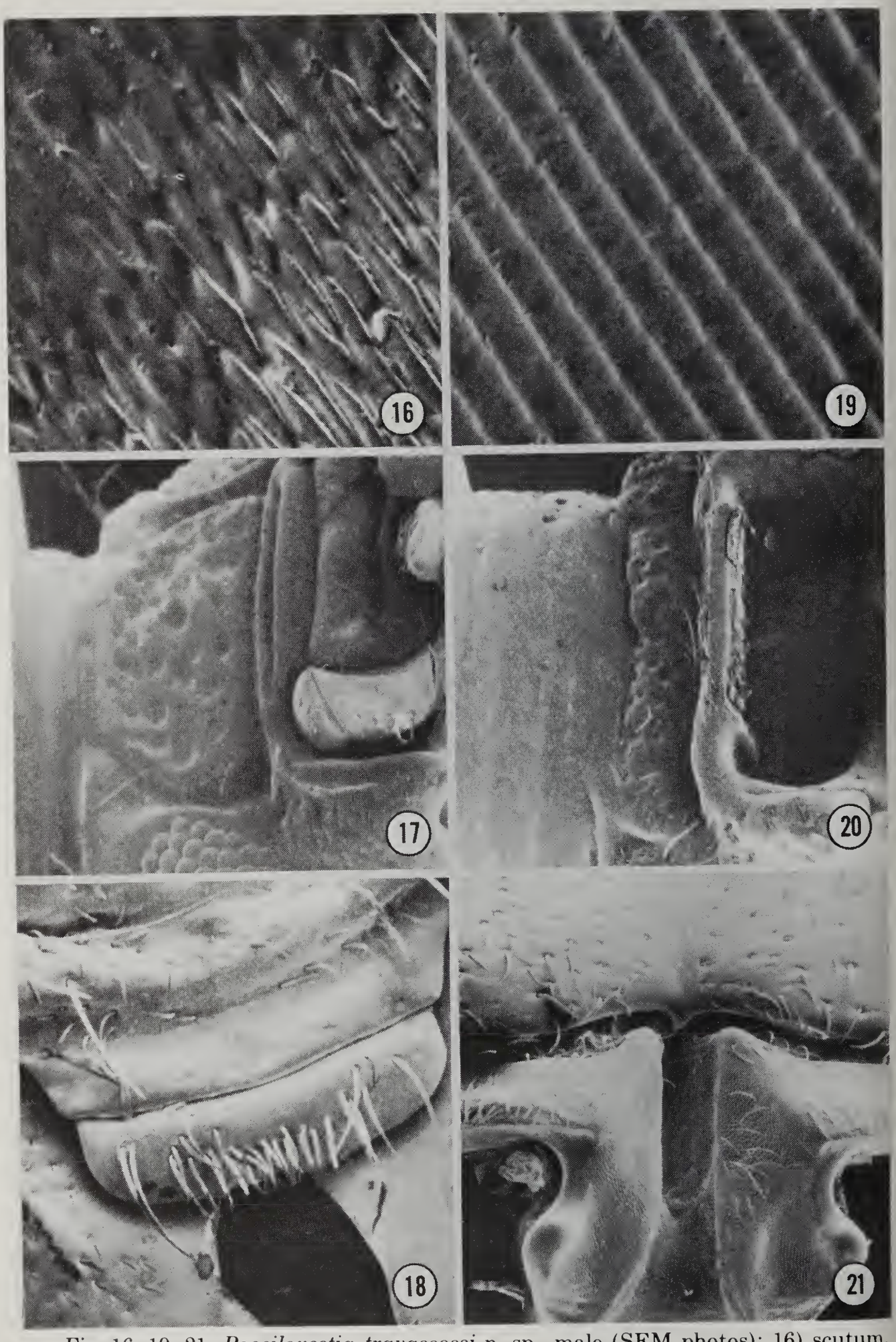

Fig. 16, 19, 21, *Poeciloxestia travassossi* n. sp., male (SEM photos): 16) scutum, dorso-lateral view (964x); 19) stridulatory file (964x), 21) metasternal infolding (42.8x); 17, *Coleoxestia spinipennis* (Serv.), gular region (285x); 18, *Poeciloxestia minuta* n. sp., male, labrum (41.5x); 20, *Poeciloxestia melzeri* Lane, male, gular region (21.5x).

The second group is composed of the genera *Criodion* Serv., *Metacriodion* Fragoso, *Butherium* Bates, *Poeciloxestia* Lane, *Coleoxestia* Auriv., and possibly the monotypic *Melathemma* Bates (unavailable at this time), where the femora are relatively shortened, the antennal segments apically unarmed, and frontal pits indistinct or reduced. This group has apparently evolved in the New World, as no closely related forms are found among Old World Cerambycini, as far as could be deduced from descriptions and a few specimens.

The position of *Poeciloxestia* within the tribe can be ascertained only after the related, presently heterogeneous genera have been better studied taxonomically. However, it is clear that *Poeciloxestia* occupies an intermediate place between *Criodion* and *Coleoxestia,* somewhat closer to the former.

Position of species within *Poeciloxestia*: The choice of characters to cluster closely related forms in groups obeys 3 main criteria: 1) least intraspecific variation, 2) ancestrality established beyond reasonable doubt, and 3) a significant morphological feature. The following characters appear relevant:

Character 1: *elytral length,* less than 3 times humeral width (a), 3 (or more) times humeral width (d). Both "in-group" and "ex-group" comparisons resulted in very few specimens with a 3x ratio (maximum "in group" ancestral ratio found: 2.55x).

Character 2: *prosternum* not bulged anteriorly (a), bulged or semibulged (d). "In-group" comparisons yield 8 of 18 with the derived condition, while among all the other taxa under the tribe Cerambycini, the ancestral condition is totally prevalent (about 90% of the species were available).

Character 3: *pronotal sculpture* rugose (a), scabrose-punctate or punctate with an impunctate discal area (d). Although the "in-group" comparisons yield 2 of 18 with the ancestral condition, all species of the first tribal sub-group have a rugose pronotum, as well as the great majority of Old World taxa (as can be established from the generic diagnosis of Lacordaire, 1869).

The combination of these 3 characters resulted in the hypothetical tree of figure 238.

The dark dorso-elytral vitta, which shows considerable intraspecific variation, defies definition, and it is extremely difficult to ascertain which pattern is ancestral. It seems to be a phenocline in which the ancestral condition is not represented in the taxa under study. It is also present in some of the smaller species of *Brasilianus,* where it occurs in highly variable apico-elytral patterns; in *Bothrocerambyx,* where it is sub-parallel or constricted anteriorly; and in species presently under *Criodion* where it takes many different shapes.

Further phylogenetical and morphological studies in related genera will undoubtedly shed more light in this group, one "des plus rebelles a la classification" due to the "difficultes insurmontables que presente l'arrangement systematique" (Lacordaire, 1869).

Key to species of *Poeciloxestia* (to be used with fig. 22 to 237)

1. Elytral length 3x or more humeral width 2
1'. Elytral length less than 3x humeral width 3

2(1). Each elytron with 2 apical spines or points, and a submedian dark dot on ochraceous background (fig. 27-31 and 44-50) ..... *signatipennis* (Melz.)

2′. Each elytron with only 1 apical spine or point, without submedian dark dot on ochraceous background (fig. 22-26 and 37-43) ..... *elegans* (Gory)

3(1′). Pronotal sculpture rugose 4

3′. Pronotal sculpture scabrous-punctate or punctate with discal areas impunctate 5

4(3). Scape obliquely depressed basally inward; antennal segments 3-4 sulcate, dorso-elytral vitta not abruptly constricted medially (fig. 104-108 and 123-129) ..... *lanei* n. sp.

4′. Scape not obliquely depressed basally; antennal segments 3-4 not sulcate; dorso-elytral vitta abruptly constricted medially (fig. 176-180 and 195-201) ..... *rugosicollis* n. sp.

5(3′). Prothoracic profile distinctly bulged behind anterior constriction in step-like fashion (fig. 73, 80, 87, 217, 224) 6

5′. Prothoracic profile not bulged, but with a broad transverse ridge (fig. 51, 109, 116, 123, 145, 152, 159, 181, 188, 195, 231) 10

6(5). Last segment of both palpi widened inward as fig. 70; fronto-lateral ridges indistinct inward; integument reddish (fig. 68-72 and 87-93) ..... *travassosi* n. sp.

6′. Last segment of palpi not widened as fig. 70; fronto-lateral ridges distinct inward; integument black or reddish-brown 7

7(6′). Genal pit separated from lower lobe of eye; pronotum callose or tuberculate laterally; dorso-elytral vitta subparallel or sinuose 8

7′. Genal pit sub-contiguous to lower lobe of eye; pronotum not callose nor tuberculate; dorso-elytral vitta constricted medially, forming an apical lanceolate or sagittate pattern 9

8(7). Pronotum callose laterally, with impunctate discal area; legs and metasternum distinctly redder than prothorax (fig. 58-62 and 73-79) ..... *bivittata* (Buq.)

8′. Pronotum tuberculate laterally, dorsally scabrous-punctate; legs and metasternum of the same color as prothorax (fig. 63-67 and 80-86) ..... *suturalis* (Perty)

9(7′). Integument black; legs, metasternum and abdomen as black as pronotum (fig. 207-216 and 224-230) ..... *lanceolata* n. sp.

9′. Integument reddish-brown; legs, metasternum and abdomen lighter (redder) than pronotum (fig. 202-206 and 217-223) ..... *paraensis* Lane

10(5′). Genal pit sub-contiguous to lower lobe of eye 11

10′. Genal pit separated from lower lobe of eye 13

11(10). 3rd antennal segment sulcate; prothorax with tuberose structures (fig. 231, 232); punctures poorly defined; male with anterior trochanters projecting forward (fig. 212-216 and 231-237) ..... *sagittaria* (Bates)

11′. 3rd antennal segment not sulcate; pronotum with well defined punctures; male anterior trochanter not projecting 12

12(11′). Metasternum and abdomen densely setose (fig. 173); lateral margin of elytra pubescent; dark dorso-elytral vitta constricted medially (fig. 171-175 and 188-194) ..... *hirsutiventris* n. sp.

12′. Metasternum and abdomen sparsely setose; elytral margin glabrous; dark dorso-elytral vitta sinuous (fig. 99-103 and 116-122) ..... *minuta* n. sp.

13(10′). Basal portion of dorso-elytral vitta sub-triangular, constricted medially; humerus on dark background as fig. 32 and 33 14

13′. Dorso-elytral vitta sub-parallel or sinuous; humerus on ochraceous background 15

14(13). Integument black; male 7th sternite deeply cut in a half-moon shape (fig. 32-36 and 51-57) ..... *melzeri* Lane

14′. Integument reddish-brown; male 7th sternite sinuous (fig. 166-170 and 181-187) ..... *carlyslei* n. sp.

15(13′). Mid and hind femora maximum length/maximum width ratio about 5 (fig. 140-144 and 159-165) ..... *parallela* n. sp.

15′. Mid and hind femora maximum length/maximum width ratio less than 3.5 16

16(15′). Metasternum and abdomen lighter in color than prothorax; dark dorso-elytral vitta variable, usually sinuous..... ..... *dorsalis* (Thoms.)

16′. Metasternum and abdomen of prothorax color; dark dorso-elytral vitta parallel to longitudinal axis at median third..... 17

17(16′). Last segment of labial palp about 2x preceding segment; lateral dark vitta with a "v" shaped notch behind post-humeral area; femora of same color as prothorax (fig. 130-134 and 145-151)..... *lateralis* (Erichs.)

17′. Last segment of labial palp 1.5x or less preceding segment; lateral dark vitta not notched, parallel to elytral margin; femora lighter and redder than metasternum (fig. 135-139 and 152-158) ..... *ochrotaenia* (Bates)

Poeciloxestia lanei Fragoso, **new species**

Description: Male holotype, head integument dark reddish-brown, scabrous-punctate, punctures basally smaller and transversely elongate, forming sub-rugose texture, with median ridge-like structure between upper lobes of eyes which reverts at vertex to deep etched fronto-axial line, dividing frons and ending before post-clypeus; fronto-lateral depressions deeply punctate; fronto-lateral ridges slightly elevated, externally with a curved, excavate structure next to eye; frontal plate with upper contours irregular, surface with spaced punctures; genal pit sub-contiguous to eye; post-clypeus ridgelike, depressed medially. Labrum before fold sub-equal to ante-clypeus in height, mandibles shiny, punctate, basal ridge not prominent, moderately excavate inward, grooved outward; distal segment of maxillary palp with sides parallel, longer than sub-triangular last labial segment. Gular plate punctate-setose only at sides; head ventral surface rugose, wrinkles flattened medially, shiny. Posterior eye contour sinuous.

Antenna longer than the body, scape obliquely excavate inward in relation to antennal socket tubercle, with a deep depression on opposite side, scabrous-punctate basally, punctures gradually separating toward apex; from 3rd segment on distinctly grooved in both sides, independently of scars, which can be seen superimposed; segments 2+3 are 1.5 times 4th; segment 4 about 0.8 times 5th. Scars: dorsally,

about half on 5th, complete on 6th; ventrally, a small sub-apical spot on 3rd, less than half on 4th, complete on 5th.

Pronotum rugose, punctate between wrinkles, slightly elevated medially, with 2 sub-median tumid spots (fig. 124); prosternum punctate, less distinctly rugose than pronotum, not bulged, with a broad transverse ridge.

Elytra shiny as enamel, punctures evenly distributed; dark dorsal vitta connected to lateral, leaving humerus in dark background; lateral vitta sinuous, both vittae connected at apex, dorsal margin ending in a pointed triangle. Scutellum triangular, pubescent at sides.

Legs: front femur with basal depression; mid femur bypassing metasternal posterior border.

Metasternum shiny, pubescent at sides, with scattered punctures minutely setose; metasternal infolding not connected to thoraco-abdominal junction.

Abdomen shiny, with few long setae, short ones scattered; 7th sternite bisinuous.

Holotype, male: Brazil, State of Mato Grosso, Ladario, X-69, A. Azevedo (SF). Measurements: elytral length 12.4mm; humeral distance 4.4mm; pronotal anterior margin 2.9mm; pronotal posterior margin 3.1mm; pronotal length 3.5mm. Scape 1.9mm; 2+3rd seg. 3.9mm; 4th seg. 2.7mm; 5th seg. 3.2mm. Front femur 3.7mm; mid femur 3.9mm; hind femur 4.1mm.

Female: Unknown.

Distribution: Bolivia (Sta. Cruz) and Western Brazil (State of Mato Grosso).

Remarks and variation: A distinct species by its shiny elytra, rugose pronotum, and sulcate antennal segments.

The paratype agrees well with the above description, but is smaller (elytral length 8.9mm), has the pronotal sculpture less distinct, and the dorso-elytral border terminal point is absent. I have named it as a tribute to Dr. Frederico Lane, a long time personal friend and pioneer taxonomist on Neotropical Cerambycidae.

Specimens examined (holotype and following paratype): Bolivia, Dept. Sta. Cruz, Prov. de Ichilo, Buena Vista, A. Martinez, male (SP).

Poeciloxestia rugosicollis Fragoso, **new species**

Description: Female holotype, head integument dark reddish brown, scabrous-punctate with a median ridge-like structure between upper lobes of eyes and antennal sockets; fronto-axial line tumid, vanishing before post-clypeus: antennal tubercle bases swollen inward; fronto-lateral ridges distinct; fronto lateral depressions reduced to a few somewhat confluent punctures; frontal plate area irregularly punctate, swollen laterally; genal pit at end of a slot-like structure, almost contiguous to eye; post-clypeus ridge-like, slightly depressed medially. Labrum before fold, slightly shorter than ante-clypeus; mandibles smoothly ridged, abruptly excavate inward, sub-shiny, outer groove reduced; maxillary palp distal segment with sides parallel on distal half, sub-equal to last labial segment. Gular plate punctate-setose, areas outside the punctures shiny, areas within punctures differently sculptured, not shiny; head ventral surface rugose, wrinkles smoothed at median shiny portion.

Antenna attaining about half elytral length, scape punctate except at apex; segments 3-11 flattened and widened (fig. 178); segments 2+3 are 2.1 times 4th; 4 about 0.9 times 5th. Scars: dorsally, a small sub-apical spot on 5th, almost complete on 6th, complete on 7th; ventrally, a small spot on 3rd, incomplete but greater than half on 4th; complete on 5th.

Pronotum rugose-punctate, punctures between sinuous wrinkles which partially and anteriorly obey contours of 2 median, transverse, sub-circular areas (fig. 196). Prosternum not bulged, scabrous punctate, punctures somewhat transversely seriate.

Elytra sub-coriaceus, surface shiny, densely and evenly punctate; dorsal and lateral dark vittae connected dorsally, humeral apex on dark background, dorsal

vitta of sub-medially constricted type (fig. 176); lateral dark vitta as on fig. 177; dorsal margin ending in a blunt angle. Scutellum sub-triangular, apex truncate, pubescent except at a median triangle.

Legs: front femur not depressed basally; mid femur slightly bypassing metasternal border.

Metasternum shiny, pubescent at sides, other setae scattered; metasternal infolding connected to thoraco-abdominal junction by a fine, slightly depressed line.

Abdomen duller than metasternum, distinctly more setose than metasternum, setae arising from indistinct punctures; 7th sternite rounded.

Holotype, male: Ecuador, Chiguaza, XII-69, P. Lopez (SF). Measurements: elytral length 19.3mm; humeral distance 7.5mm; pronotal anterior margin 3.8mm; pronotal posterior margin 4.5mm; pronotal length 3.8mm. Scape 2.55mm; 2+3rd seg. 3.2mm; 4th seg. 1.5mm; 5th seg. 1.7mm. Front femur 5.5mm; mid femur 5.6mm; hind femur 6.0mm.

Male: Unknown.

Distribution: Ecuador.

Remarks: Closely related to *hirsutiventris* n. sp. and *lanei* n. sp. this species is distinct by the widened antennal segments, rugose pronotum, lateral vitta as in fig. 177, etc. Known from a single specimen.

Poeciloxestia ochrotaenia (Bates, 1870), **new combination**

Xestia ochrotaenia, Bates 1870:257
Xestia ochrotaenia, Bates 1872:173
Xestia ochrotaenia, Gemminger and Harold 1872:2807
Coleoxestia ochrotaenia, Aurivillius 1912:65
Coleoxestia ochrotaenia, Blackwelder 1946:561
Coleoxestia ochrotaenia, Zajciw 1967:199

Description: Male, head integument dark reddish brown, scabrous-punctate, punctures smaller on vertex and frons, with a median raised ridge-like structure from between upper lobes of eyes to vertex; fronto-axial line arising at vertex, deeply dividing frontal plate, ending at post-clypeus; fronto-lateral ridges slightly higher than frons; frontal plate with a few punctures (larger than on surrounding areas) except at lower portion; genal pit separated from eye, located at an imaginary line parallel to fronto-axial line and tangent to innermost eye portion; post-clypeus depressed medially. Labrum before fold shorter than ante-clypeus; mandibles highly ridged medially, deeply excavate inward, grooved and rugose-punctate outward, sparsely setose; maxillary palp distal segment sub-equal to last labial segment, lateral contours with opposed curvatures (parenthesis-like, fig. 137). Gular plate matte, densely setose; head ventral surface with a median irregular area of different sculpture. Posterior eye contour straight, parallel to frontal plane.

Antenna longer than body, scape punctate, more deeply so basally; segments 2+3 are 1.4 times 4th; 4 about 0.8 times 5th. Scars: dorsally, a small sub-apical spot on 5th, complete on 6th; ventrally, a small spot on 4th, shorter than half on 5th, complete on 6th.

Prothorax scabrose-punctate, dorsally with a median impunctate longitudinal area, contours somewhat rounded (fig. 153). Prosternum not bulged, with a broad transverse ridge.

Elytra sub-coriaceus, shiny, punctures slightly deeper basally, evenly distributed over elytral surface; dorsal vitta tapering gradually toward apex (fig. 135), occupying more than half of dorso-elytral area; lateral vitta parallel to margin, not notched at post humeral area; dorso-elytral border ending in a blunt point; humerus on ochraceous background. Scutellum rounded, pubescent at borders.

Legs: front femur not depressed basally; mid femur bypassing metasternal border when articulated parallel to body axis; all femora distinctly lighter (redder) than metasternum and abdomen.

Metasternum shiny, pubescent at sides, other setae scattered; metasternal infolding connected to thoraco-abdominal junction by a shallow groove.

Abdomen shiny, with a few setae; 7th sternite bisinuous.

Distribution: Brazil, State of Para ("Upper Amazons" according to Bates).

Remarks and variation: The 2 female "cotypes", housed in the Paris Museum (MNHN, ex-coll. Bates) were requested but not made available, but through the courtesy of Pe. J. S. Moure, I have been able to study a color slide of both type-specimens. From the specimens at my disposal, only 1 male (which almost disintegrated when treated in an ultrasonic cleaner) agrees with both the original description and the color slide.

Bates (1870:257) wrote: "There is no difference between them (*ochrotaenia* and *lateralis),* except the mode in which the yellow vittae is narrowed to the humeral angle." Later, under the description of *sagittaria* (1872:173), he stated: "A distinct species of *elegans* (Gory) and *lateralis* (Erichson) group.", not referring to his already described *ochrotaenia.* From the study of the unique specimen, the following differences distinguish it from *lateralis*; 1) the relatively shorter distal segment of labial palp (fig. 132 and 137); 2) the mid-femora bypassing the metasternal border; 3) the connection of metasternal infolding to the thoraco-abdominal junction by a groove (fig. 150 and 157); 4) the relatively wider dorsal vitta (fig. 130 and 135), and 5) femora lighter than metasternum and abdomen.

Specimen examined: Brazil, State of Para, Obidos, 1-67, male (SF).

Poeciloxestia lateralis (Erichson, 1847), **new combination**

Xestia lateralis, Erichson 1847:140
Xestia lateralis, White 1853:135
Xestia lateralis, Lacordaire 1869:271
Xestia lateralis, Bates 1870:257
Xestia lateralis, Bates 1872:173
Criodion laterale, Gemminger and Harold 1872:2806
Coleoxestia lateralis, Aurivillius 1912:65
Coleoxestia lateralis, Blackwelder 1946:56

Description: Male, head integument dark reddish brown, scabrous-punctate, punctures smaller at vertex and frons; fronto-axial line arising between antennal sockets, dividing frons and ending at post-clypeus; fronto-lateral depressions distinct and punctate; frontal-plate indistinct, area punctate; fronto-lateral ridges excavate outward; genal pit distant from lower lobe of eye; post-clypeus depressed medially. Labrum before fold slightly shorter than ante-clypeus; mandibles with a high basal ridge, deeply excavate inward, punctate-rugose, grooved outward; maxillary palp distal segment slightly shorter than last labial segment, length about 2 times width, sides sub-parallel. Gular plate gradually dilated to extremities, with poorly defined setose punctures. Eye posterior contours almost straight.

Antenna longer than body, scape scabrous-punctate, segments 2+3 are about 1.3 times 4th; 4 slightly shorter than 5th. Scars: dorsally, a series of sub-apical punctures on 4th, complete but interrupted medially on 5th; ventrally, a sub-apical spot, shorter than half on 3rd, longer than half on 4th, complete on 5th; ventral scars distinctly more defined than dorsal ones.

Prothorax scabrous-punctate, dorsally with irregular small impunctate areas (fig. 146). Posternum not bulged, with a broad transverse ridge (fig. 145).

Elytra coriaceus, with shallow small punctures of sub-equal diameter over entire surface, with broad dorsal dark vittae as in fig. 130, in some specimens arising a little behind humerus, sub-sinuous to sub-parallel at median portion; lateral vittae wider at post-humeral area, notched (fig. 131). Scutellum usually angulose at apex, sides curved, pubescent at borders.

Legs: front femur not depressed basally, mid femur not attaining metasternal infolding.

Metasternum shiny, densely pubescent at sides, other setae scattered; metasternal infolding separated from thoraco-abdominal junction by a plane area.

Abdomen shiny, setose as metasternum; 7th sternite bisinuous (fig. 151).

Female: antenna shorter than body, 7th abdominal sternite broadly curved.

Distribution: Bolivia and Eastern Peru.

Remarks and variation: *P. lateralis* is closely allied to *ochrotaenia* Bates, from which it differs by the long distal segment of both palpi and the lateral vittae distinctly wider at post-humeral area, legs and metasternum of the same light color, characters found constant in all specimens examined. The dark dorsal vitta may or may not enclose humeral apex.

The holotype was made available through the courtesy of Dr. H. Wendt, Museum fur Naturkunde, Humboldt University.

Specimens examined: Peru, "Peru mont. Phil.", no 18098, holotype, male (MNHU); no other data, female (MNHU), Dept. of Loreto, Puccalpa, XII-68, J. Schunke, female (SF); Tingo Maria, XI-55, female (CS); Cosnipata, 1700m, XII-51, F. Voytkovsky, female (USNM) Dept. of Cuzco, Quincemil, X-62, L. Pena, 1 male and 2 females (CS).

Bolivia, Cochabamba, Yungas, X-49, male (CS), Alto Palmar, XI-60, female (EF); Sta. Cruz, Buena Vista, 480m, no date, female (CS), IX-50, L. Pena, male (EF); Chapare, XI-47, male (CS); Sara, 450m. XI-09, J. Steinbach, male (CM).

Poeciloxestia parallela Fragoso, **new species**

Description: Male holotype, head integument dark reddish brown, scabrous-punctate, dorsal punctures about same size as on pronotum, smaller at vertex and frons, with a median slightly ridge-like structure separating antennal sockets deeply and continuing as front-axial line, dividing frons, ending at lower portion of frontal plate; an oblique, deep, inner groove at bases of antennal tubercles; frons depressed fronto-lateral depressions scabrous-punctate, lower borders delimiting a sub-triangular impunctate frontal plate; fronto-lateral ridges raised, punctate, excavate outward next to eye; genal pit separated from lower lobe of eye; post-clypeus medially depressed. Labrum before fold shorter than ante-clypeus; mandibles ridged, deeply excavate inward, rugose punctate, with a shallow lateral groove; maxillary palp distal segment slightly smaller than last labial segment, both with same general curved shape. Gular plate matte, setose; ventral head surface rugose, wrinkles flattened medially. Posterior eye contour curved.

Antenna longer than the body, scape punctate-rugose almost to apex, there with a few punctures, segments 2+3 are 1.5 times 4th; 4 slightly shorter than 5th. Scars: dorsally, shorter than half on 5th and 6th, complete on 7th; ventrally, an apical spot on 3rd, shorter than half on 4th, 5th and 6th, complete on 7th.

Prothorax scabrous-punctate, except along a notal median irregular longitudinal area and 2 sub-circular spots. Prosternum not bulged, with a broad transverse ridge (fig. 159).

Elytra coriaceus, punctate, punctures sub-equal in size and density over entire elytral surface; dorsal vittae slightly wider basally, sub-parallel to suture to apical third then tapering gradually, ending before apex (fig. 140); lateral vitta with sides almost straight, tapering to and ending before apex (fig. 141); dorso-elytral border terminating in a blunt point. Humerus on ochraceous background. Scutellum sub-triangular, pubescent at borders, apex somewhat truncate.

Legs: front femur with basal, transverse, curved, smooth irregular ridges; mid femur bypassing metasternal border when articulated parallel to body axis, shallowly grooved longitudinally. Mid and hind femora contours sub-parallel (fig. 162-163).

Metasternum shiny, sparsely punctate-setose, pubescent at sides; metasternal infolding connected with thoraco-abdominal junction by a groove.

Abdomen shiny, sparsely setose-punctate; 7th sternite sinuous.

Holotype, male: Brazil, State of Sao Paulo, Rio Claro, 11-40 (CS). Measurements: elytral length 23mm; humeral distance 9.1mm; pronotal anterior margin 5.1mm; pronotal posterior margin 9mm; pronotal length 5.5mm. Scape 3.2mm; 2+3rd seg. 6.6mm; 4th seg. 4.1mm; 5th seg. 4.6mm. Front femur 6.2mm; mid femur 6.7mm; hind femur 7.3mm.

Female: antenna shorter than body, 7th abdominal sternite rounded with a small apical indentation, 4th antennal segment about 0.9 times 5th, sum of 4+5 greater than 2+3.

Allotype, female: Brazil, State of Minas Gerais, Araxa, XI-37 (CS). Measurements: elytral length 24.5mm; humeral distance 9.1mm; pronotal anterior margin 5.0mm; pronotal posterior margin 6.1mm; pronotal length 5.1mm. Scape 3.2mm; 2+3rd seg. 5.6mm; 4th seg. 2.7mm; 5th seg. 2.9mm. Front femur 6.2 mm; mid femur 6.7mm; hind femur 7.4mm.

Distribution: Brazil (States of Sao Paulo, Minas Gerais, and Para).

Remarks and variation: This species is distinct from all others by the sub-parallel contours of the mid and hind femora. From *dorsalis,* it differs by the mid femur bypassing the metasternal infolding, by the lateral dark vitta, etc.

The allotype has a small median spot on the ochraceous background of the left elytron, but on the right, this same area appears as a dilute smear. The paratype from Para agrees well in all characters, but there is a remote chance of mislabelling.

Specimens examined (holotype, allotype and following female paratypes): Brazil, State of Para, Obidos, 1-40 (CS); State of São Paulo, Pirassununga, no date, J. Gaspar (SP).

Poeciloxestia dorsalis (Thomson, 1860), **new combination**

Xestia dorsalis, White 1853:135 (*nomen nudum)*
Criodion dorsale, Thomson 1860:193
Criodion dorsale, Gemminger and Harold 1872:2806
Xestia dorsalis, Gahan 1892:32
Coleoxestia dorsalis, Aurivillius 1912:64
Coleoxestia dorsalis, Blackwelder 1946:561

Description: Male, head integument dark reddish brown, scabrous-punctate, punctures smaller dorso-basally, with a median, slightly raised ridge-like structure between antennal tubercles, usually with seriate punctures at sides; fronto-axial line beginning between antennal tubercles and vanishing at lower portion of frontal plate; fronto-lateral depressions and ridges distinct, punctate; frontal plate usually distinct, impunctate (in some specimens reduced to an irregular transverse area); genal pit separated from lower lobe of eye; post-clypeus curved, depressed medially. Labrum before fold about half width of ante-clypeus; mandibles rugose-punctate, basal ridge not prominent, excavate inward; shallowly grooved outward; distal segment of maxillary palp with curved sides, similar in width and shape to last labial segment. Gular plate matte, setose-punctate, punctures poorly defined, some confluent; ventral head surface rugose, wrinkles flattened medially.

Antenna longer than body, scape scabrous-punctate basally, punctures gradually smaller and separated toward apex; segments 2+3 from 1.7 to 1.9 times 4th; 4 about 0.85 times 5th. Scars: dorsally, smaller than half on 4th, complete but discontinuous on 5th; ventrally, a small sub-apical spot on 3rd, shorter than half on 4th, almost complete on 5th.

Prothorax scabrose-punctate, dorsally with a median impunctate area, in some specimens with 2 posterior pubescent spots, 1 on each side of longitudinal axis (fig. 110). Prosternum not bulged, with a broad transverse ridge.

Elytra coriaceus, punctate, punctures small and shallow, sub-equal in size and density over entire elytral surface; dark dorsal vittae variable, from slightly sinuous to almost constricted about first third; lateral dark vittae distinctly wider at post-humeral area, then, parallel to margin (fig. 95), in some specimens confined

to raised elytral margin; dorso-elytral border ending in a blunt point; humerus usually on ochraceous background. Scutellum subtriangular, sides curved, pubescent at borders.

Legs: front femur without basal depression, mid femur not attaining metasternal infolding.

Metasternum somewhat dull, pubescent at sides, sparsely setose; metasternal infolding not connected to thoraco-abdominal junction by a groove, but in some specimens a fine line is present.

Abdomen with scattered setae, slightly shinier than metasternum; 7th sternite bisinuous.

Female: antenna shorter than body, with segments 4 to 10 shortened, sum of 4th plus 5th less than 2 and 3 taken together, 7th abdominal sternite usually truncate, with a small notch.

Distribution: Southeastern Brazil (States of Espirito Santo, Minas Gerais, Parana, Rio de Janeiro, Rio Grande do Sul, Santa Catarina, Sao Paulo).

Remarks and variation: Some specimens usually labelled as *dorsalis* have been characterized and described as new in this revision, and additional holomorphic data may prove that the specimens herein included under *dorsalis* suggest a complex of species. The populations from Rio de Janeiro and Santa Catarina, 2 states far apart, are very similar, but the specimens from Sao Paulo show subtle differences from both populations; the integumental color is lighter, more reddish; the dorsal dark vitta is highly variable in shape, and the metepisternal infolding is connected to the abdominal junction by a line or a subtle step-like formation.

P. dorsalis differs from *parallela* by the shape of the femur, by the absence of a sulcus or groove connecting the metasternal infolding to thoraco-abdominal junction and the females by the sum of antennal segments, 4+5 smaller than 2+3. See also remarks under *minuta*. n. sp.

The holotype, housed in the MNHN, Paris, has not been made available, but through the courtesy of Pe. J. S. Moure a color slide was examined, which shows the 2 pubescent pronotal spots. These spots in the extensive series studied are the exception rather than the rule. Size range: elytral length: 37-24mm; humeral distance: 10-6.7mm.

Specimens examined: Brazil, State of Espirito Santo, Jetiba (1), Rio Lamego (1), Viana (1); State of Bahia, km 965 Estrada Rio-Bahia (2); State of Rio de Janeiro, Angra dos Reis (1), Corcovado (10), Floresta da Tijuca (5), Itatiaia (1), Jacarepagua (1), Nova Friburgo (1), Parati (1), Terezopolis (3); State of Rio Grande do Sul, Pelotas (1); State of Minas Gerais, Aguas Vermelhas (1), Belo Horizonte (2), Manhumirim (1); State of Parana, Arapoti (1); State of Santa Catarina, no other data (3), Corupa (15), Joinville (3), Mafra (1), Sao Bento (1); State of Sao Paulo, Amparo (1), Aresaca (1), Barueri (2), Boraceia (11), Botucatu (1), Bristol (1), Campos do Jordao (3), Cantareira (2), City of Sao Paulo (11), Cubatao (1), Faixina (1), Horto Florestal (1), Osasco (1), Paraibuna (1), Pindamonhagaba (1), Serra da Bocaina (1).

Poeciloxestia minuta Fragoso, **new species**

Description: Male holotype, head integument reddish-brown, scabrous-punctate, punctures basally smaller, with a median irregular ridge-like structure beginning between upper lobes of eyes, which reverts to a deep fronto-axial line at vertex, dividing frons and vanishing before post-clypeus; fronto-lateral depressions partially impunctate; fronto-lateral ridges feebly elevate, connected laterally to poorly defined frontal plate by a isthmus; genal pit sub-contiguous to eye; post-clypeus ridge-like, slightly depressed medially. Labrum before fold half as long as ante-clypeus; mandibles shiny, not distinctly grooved outward, shallowy excavate inward, basal ridge smoothed; distal segment of maxillary palp sub-parallel apically, slightly shorter than last labial segment. Gular plate punctate-rugose, punctures poorly defined, surface matte; ventral head surface sub-rugose, shiny, wrinkles almost com-

pletely flattened. Eyes bulbous, distinctly darker than integument, with inferior contours bypassing profile outline.

Antenna longer than body, scape basally sub-scabrous, punctures gradually separating toward impunctate apex; segments 2+3 approximately 1.6 times 4th; 4 about 0.85 times 5th. Scars: dorsally, a small subapical spot on 3rd, about half on 4th, complete on 5th; ventrally, less than half on 3rd, complete on 4th.

Prothorax scabrous-punctate, dorsally with a median impunctate longitudinal area, anterior border as in fig. 117. Prosternum not bulged, anteriorly with a broad ridge.

Elytra shiny, punctate, punctures dense and well-defined, slightly deeper basally, evenly distributed over entire surface; dark dorsal vitta sub-sinuous, ending before apex (fig. 99); dark lateral vitta wider at post-humeral area, usually tapering gradually to apex, sometimes confined to raised margin; dorso-elytral border ending in an acute point; humerus on ochraceous background. Scutellum with sides curved, angulose at apex.

Legs: front femur not depressed basally, mid femur bypassing the metasternal infolding (fig. 101), when articulated parallel to body axis.

Metasternum shiny, pubescent at sides, with other scattered setae; metasternal infolding connected to thoraco-abdominal junction by a fine depressed line (fig. 121).

Abdomen shiny, punctate-setose; 7th sternite bisinuous.

Holotype, male: Brazil, State of Rio de Janeiro, Corcovado, X-67, Fragoso (SF). Measurements: elytral length 15.5mm; pronotal anterior margin 3mm; pronotal posterior margin 3.5mm; pronotal length 3.2mm. Scape 1.9mm; 2+3rd seg. 3.4mm; 4th seg. 2mm; 5th seg. 2.2mm. Front femur 3.9mm; mid femur 4.2mm; hind femur 5.2mm.

Female: antenna shorter than body, 7th sternite rounded, with a small notch apically.

Allotype, female: Brazil, State of Rio de Janeiro, Corcovado, XI-68, Fragoso (SF). Measurements: elytral length 17.5mm; pronotal anterior margin 3.5mm; pronotal posterior margin 4.2mm; pronotal length 3.7mm. Scape 2.1mm; 2+3rd seg. 3.1mm; 4th seg. 1.5mm; 5th seg. 4.8mm. Front femur 4.1mm; mid femur 4.5mm; hind femur 5.1mm.

Distribution: Southeastern Brazil (States of Espirito Santo, Mato Grosso, Minas Gerais, Parana, Pernambuco, Rio de Janeiro, Rio Grande do Sul, Santa Catarina and Sao Paulo).

Remarks and variation: Sympatric and closely allied to *dorsalis* Thoms., from which it differs by the genal pits sub-contiguous to the eye, by the lower profile of eye tangent or bypassing the head contours, the mid femur bypassing metasternal border, the general lighter color and smaller size, etc. The typical series is very uniform, as well as the population from Serra da Bocaina, but specimens from Santa Catarina and Espirito Santo often show a median outgrowth of the lateral vittae. The populations from Santa Catarina are usually darker, have stouter antenna with the dorsal scar on 3rd segment more conspicuous.

Specimens examined (holotype, allotype and following): Paratypes (46), Brazil, State of Rio de Janeiro, Corcovado (CIS, CS, SF, SP, USNM).

Non paratypes (155): Brazil, State of Espirito Santo, Corrego Ita (1), Jabaete (2), Linhares (2), Matilde (37), Santa Tereza (2); State of Mato Grosso, Murtinho (1); State of Minas Gerais, Pocos de Caldas (2), Serra do Caraca (5), Villa Monteverde (2); State of Parana, Horto Florestal (1), Guarapuava (2); State of Pernambuco, Garanhuns (1); State of Rio de Janeiro, Angra dos Reis (1), Itatiaia (5), Floresta da Tijuca (1), Mage (1), Nova Friburgo (2), Petropolis (4), Terezopolis (7); State of Rio Grande do Sul, Sta. Cruz do Sul (1); State of Santa Catarina, no other data (4), Corupa (30), Cruzeiro (1), Mafra (3), Rio Vermelho (5); State of Sao Paulo, Amparo (1), Boraceia (2), Campos do Jordao (2), City of Sao Paulo (2), Cantareira (1), Pindamonhagaba (4), Sao Paulo dos Agudos (2), Serra da Bocaina (18), Umuarama (1).

Poeciloxestia hirsutiventris Fragoso, **new species**

Description: Male holotype, head integument reddish brown, scabrous-punctate, with a somewhat irregular ridge-like structure between eyes, reverting at vertex to a deep fronto-axial line, dividing frons and ending at lower limit of frontal plate; antennal tubercle bases swollen inward; fronto-lateral depressions reduced, densely punctate; fronto-lateral ridges moderately elevated, punctate, externally excavate next to eye; frontal plate impunctate, transverse; genal pit sub-contiguous to eye; post-clypeus depressed, broadly flattened medially. Labrum before fold about half as short as ante-clypeus; mandibles shiny, punctate, basal ridge broadly and smoothly elevate, shallowy excavate inward, outer groove reduced; distal segment of maxillary palp with curved sides, longer than last sub-triangular labial segment. Gular plate setose, anteriorly bearing a wide, glabrous, slightly depressed area, triangular and conspicuous (curved and less distinct on paratypes). Lower lobe of eye swollen, large, posterior contours slightly curved.

Antenna longer than body, scape punctate, segments 2+3 about 1.4 times 4th; 4 approximately 0.9 times 5th. Scars: dorsally, a small sub-apical spot on 3rd, about half on 4th, complete on 5th; ventrally, about half on 3rd, almost complete on 4th. Segments 4 to 11 densely pubescent.

Prothorax scabrous-punctate, punctures less dense on disc, anteriorly with 2 elevated spots separated medially by a longitudinal crest (fig. 189). Prosternum with a broad transverse ridge, not bulged, setose.

Elytra somewhat shiny, densely punctate, punctures deeper basally and darker than surface; a few long setae arising from larger punctures at elytral base, along dorsal border and on apical 4th; dorso-elytral vitta of sub-medially constricted type (fig. 171); lateral vitta wider at post-humeral area, constricted on basal 4th, then widening again and running parallel to lateral long setose margin (fig. 172); dorso-elytral margin ending in a well-defined point; humerus on ochraceous background. Scutellum rounded, pubescent at borders.

Legs: front femur without basal depression, mid femur attaining metasternal border when articulated parallel to body axis; all femora provided with long setae.

Metasternum densely setose, postero-lateral region tumid, sides pubescent; metasternal infolding connected to sterno-abdominal junction by a line.

Abdomen densely punctate-setose (fig. 173), punctures distinct, setae long; 7th sternite sinuous.

Holotype, male: Bolivia, Cochabamba, X-69, P. Lopez (SF). Measurements: elytral length 19.5mm; humeral distance 6.5mm; pronotal anterior margin 3.3mm, pronotal posterior margin 4.1mm; pronotal length 3.2mm; Scape 2.2mm; 2+3rd seg. 4.6mm; 4th seg. 3.2mm; 5th seg. 3.5mm. Front femur 4.6mm; mid femur 5.2mm; hind femur 5.3mm.

Female: Antenna shorter than body, 7th abdominal sternite bisinuous.

Allotype, female: Bolivia, Yungas del Palmar, 2000m, X-54, R. Ziscka (USNM). Measurements: elytral length 19.9mm; humeral distance 7.4mm; pronotal anterior margin 3.3mm; pronotal posterior margin 4.5mm; pronotal length 3.6mm. Scape 2.1mm; 2+3rd seg. 3.2mm; 4th seg. 1.6mm; 5th seg. 1.8mm. Front femur 4.6mm; mid femur 4.8mm; hind femur 5.8mm.

Distribution: Bolivia, Peru.

Remarks and variation: Similar to *rugosicollis* n. sp., but distinct by its non-rugose pronotum (fig. 189), by the pattern of lateral vitta (fig. 172), by the general form of the femora (fig. 190, 191, 192), by the 7th sternite bisinuous in females, etc. From all others it is distinct by the densely setose sternum (fig. 173). Elytral range: 12.8-19.9mm.

Specimens examined (holotype, allotype and following paratypes, males): Bolivia, Prov. Chapare, Limbo, 2000m, XI-53, Prosen (SP); Incachaca, 2100m, IX-57 (EF—elytral apex and genitalia missing). Peru, Cosnipata, 1700m, XII-51, F. Voytkovski (USNM).

Poeciloxestia carlyslei Fragoso, **new species**

Description: Male holotype, head integument dark reddish brown, scabrous punctate, median ridge indistinct; fronto-axial line beginning between antennal socket tubercles, somewhat tumid, ending before post-clypeus; fronto-lateral ridges elevated, punctate, deeply excavate next to eye; fronto-lateral depressions reduced to small spots; frons depressed, punctate; frontal plate indistinct; transverse groove, deeper at extremities, separates frons from medially flattened post-clypeus; genal pit separated from lower lobes of eye. Labrum before fold slightly shorter than ante-clypeus; mandibles somewhat dull, basal ridge elevated, deeply excavate inward, grooved outward; distal segment of maxillary palp with sides parallel on apical half, sub-equal to last labial segment. Gular plate punctate-setose, depressed; ventral head surface sub-shiny, laterally rugose, wrinkles flattened medially. Posterior eye contours almost straight.

Antenna longer than body, scape with a small oblique basal depression in relation to antennal socket tubercle, irregularly depressed on opposite side, basally scabrous-punctate, punctures gradually separating toward apex; segments 2+3 are 1.5 times 4th; 4 about 0.9 times 5th. Scars: dorsally, less than half on 4th, complete but interrupted on 5th; ventrally, a small sub-apical spot on 3rd, shorter than half on 4th, complete on 5th.

Prothorax scabrous punctate, with a dorsal median elevated structure (fig. 182). Prosternum not bulged, with a transverse broad ridge.

Elytra coriaceus, punctures shallow, densely, and evenly distributed, slightly deeper basally; dorsal dark vitta of the constricted type (fig. 166) dorsally connected to lateral, leaving humeral apex on dark background; lateral dark vitta wider at post-humeral area, constricted about basal fourth, then widening a bit and becoming parallel to margin; both vittae ending before apex; dorso elytral margin ending in a blunt point. Scutellum rounded, pubescent at borders.

Legs: front femur not depressed basally, mid femur bypassing metasternal borders.

Mesosternal process deeply grooved apico-medially. Metasternum shiny, pubescent at sides, other setae scattered; metasternal infolding connected with abdominal junction by a shallow, indistinct grooved line.

Abdomen shiny, setose as metasternum; 7th sternite bisinuous.

Holotype, male: Colombia, Oriente, Prov. de Cundinamarca, Monteredondo, III-58 (CS). Measurements: elytral length 21.5mm; humeral distance 8.6mm; pronotal anterior margin 5.0mm; pronotal posterior margin 5.7mm; pronotal length 5.0mm. Scape 2.95mm; 2+3rd seg. 5.9mm; 4th seg. 3.9mm; 5th seg. 4.2mm. Front femur 5.7mm; mid femur 6.2mm; hind femur 6.6mm.

Female: antenna shorter than body, mandibles less developed, legs slender, 7th abdominal sternite broadly rounded.

Allotype, female: Colombia, Valle del Cauca, Cali, IV-69, L. Denhez (SF). Measurements: elytral length 22.3mm; humeral distance 8.3mm; pronotal anterior margin 4.3mm; pronotal posterior margin 5.2mm; pronotal length 4.5mm. Scape 2.4mm; 2+3rd seg. 4.0mm; 4th seg. 2.0mm; 5th seg. 2.2mm. Front femur 5.2mm; mid femur 5.7mm; hind femur 6.1mm.

Distribution: Colombia.

Remarks and variation: A distinct species of the constricted dorsal vitta group, differing from all others by the deeply sulcate mesosternal process, absence of a distinct frontal plate, oblique basal depression of scape, and the pattern of dorsal vitta. The 5 specimens from the typical series show little variation in size and pattern of dorsal vitta.

Specimens examined (holotype, allotype and following paratypes, females): Colombia, Valle del Cauca, Cali, IV-69, L. Denhez (2, SF); Prov. Cundinamarca, Monteredondo, III-58 (CS).

Poeciloxestia melzeri Lane 1965

Coleoxestia sagittaria, Melzer 1923:5
Coleoxestia sagittaria, Melzer 927:151
Poeciloxestia melzeri, Lane 1965:270

Description: Male, head integument black, basally scabrous-punctate, punctures between upper lobes of eyes shallow or missing; a median broad ridge between antennal sockets reverts at apex to form fronto-axial line which divides frons and ends at post-clypeus; fronto-lateral depressions usually small, reduced; fronto-lateral ridges slightly elevated, deeply excavate outward; frontal plate irregularly punctate, genal pit separate from lower lobe of eye; post-clypeus ridge-like, depressed at middle. Labrum before creased fold shorter than ante-clypeus; mandibles shiny only at cutting extremity, highly ridged, deeply excavate inward, grooved outward; distal segment of maxillary palp slightly curved, sub-equal to last labial segment. Gular plate punctate-setose, punctures poorly defined: ventral area subrugose, wrinkles flattened medially. Posterior eye contours almost straight.

Antenna longer than body, scape sub-scabrous-punctate, dorsally flattened, obliquely contoured inward in correspondence with antennal socket tubercles; segments 2+3 from 1.5 to 1.8 times 4th; 4 about 0.8 times 5th. Scars: dorsally, a small sub-apical spot on 5th, about half on 6th, complete on 7th but usually interrupted medially; ventrally, a small deep spot on 3rd, shorter than half on 4th, complete on 5th.

Prothorax dorsally scabrous-punctate with a median impunctate longitudinal area (fig. 52); prosternum not bulged, with a broad ridge anteriorly.

Elytra coriaceus, punctures small, evenly distributed over entire surface; dark dorsal vitta of the constricted type (fig. 32); lateral vittae variable at post-humeral constriction (may attain lateral margin or be almost nonexistent as in fig. 33); humerus on dark background. Scutellum rounded, pubescent at sides.

Legs: front femur depressed basally, trochanter tumid; mid femur bypassing metasternal border, when articulated parallel to body axis.

Metasternum shiny, with few long setae, pubescent at sides; metasternal infolding connected to thoraco-abdominal median junction by a distinct groove.

Abdomen shiny, pubescent at sides, with scattered long setae, 7th sternite deeply bisinuous (fig. 57).

Female: antenna shorter than body, front femora without basal depression, front trochanter less tumid, 7th sternite broadly rounded.

Distribution: Bolivia (Dept. of Santa Cruz), Brazil (States of Espirito Santo, Minas Gerais and Rio de Janeiro) and Peru (Dept. of Junin).

Remarks and variation: A distinctive species, differing from *sagittaria* Bates by the coriaceus elytra, the dense scabrous-punctate pronotum, the deeply bisinuous male 7th sternite (fig. 57), etc.

The specimens from Bolivia and Peru expand considerably the distribution of *melzeri* Lane, yet the variation of the dorsal pattern is minimal.

The only Lane paratype not examined (BM, ex-coll. Parry), labeled from "Brasilia", must be interpreted as the Latin name of Brazil, and not the city of Brasilia, Federal District (State of Goias), constructed in the late 1950's, which became the capital in 1960.

Specimens examined: Bolivia, Dept. of Santa Cruz, Buena Vista, 480m, 2 females, 1922, R. C. Robert (USNM) and 1950, L. Pena (EF). Brazil, State of Espirito Santo, Conduru, XI-41, A. Maller, paratype female (CS), and X-(?), A. Maller, paratype, male (SP), Guandu, IX-20, F. Hoffman, holotype, male (SP), Itapemirim, 1940, A. Maller, paratype, female (CS), Linhares, I-65, A. Maller, male (CS), Matilde, XII-32 (USNM), Vargen Alta, 2 paratypes, males, 1940, A. Maller (CS), and X-39 (AMNH); State of Minas Gerais, Manhuassu, XI-21, D. Pacca, paratype, female (SP); State of Rio de Janeiro, Horto Florestal, X-32, I. Nunes, paratype, female (SP), Represa Rio Grande, X-69, F. Oliveira, female (CS). Peru, Dept. of Junin, Satipo, XI-43, A. Maller, female (CS).

Poeciloxestia sagittaria (Bates, 1872), **new combination**

Xestia sagittaria, Bates 1872:173
Xestia sagittaria, Gemminger and Harold 1872:2807
Xestia sagittaria, Bates 1880:17, pl. 3, fig. 9
Coleoxestia sagittaria, Aurivillius 1912:65
Coleoxestia sagittaria, Blackwelder 1946:561
Coleoxestia sagittaria, Lane 1965:273, 274

Description: Male, head integument dark reddish brown, with scattered shallow punctures; in place of usual median ridge, a tumid area between upper lobes of eyes, forming a line at bases of flattened antennal tubercles; fronto-axial line distinct dorsally, dividing frons and ending before post-clypeus; fronto-lateral depressions shallow, consisting of some deeper punctures; frontal plate indistinctly defined superior and laterally, with a few punctures, inferiorly delimited by a groove; genal pit almost contiguous to eye; post-clypeus ridge-like, with a few punctures at elevated lateral portions. Labrum before creased fold shorter than ante-clypeus; mandibles shiny, punctate, basal ridges flattened, moderately excavate inward, outer groove shallow; distal segment of maxillary palp with sides curved, sub-equal to last labial segment. Gular plate with a few undefined setose punctures, deeply grooved anteriorly, posteriorly delimited by slightly different sculpture; ventral head surface rugose, wrinkles flattened medially. Posterior eye contours curved.

Antenna longer than body, scape with base obliquely excavate inward, lobed outward, sparsely punctate; 3rd segment with a smooth, shallow, length-wise groove, not sculpturally differentiated, remaining segments distinctly flattened; segments 2+3 about 1.5 times 4th; 4 slightly shorter than 5th. Scars: dorsally, an apical ellipsoid point on 4th, shorter than half on 5th and 6th, complete but somewhat discontinuous on 7th; ventrally, an small apical spot on 3rd, about half on 4th, complete on 5th.

Prothorax sparse and shallowy punctate, with 7 discal slightly tuberose shiny elevations (fig. 232); prosternum not bulged, indistinct and sparsely punctate, anteriorly with a broad transverse ridge (fig. 231).

Elytra highly polished, shiny, shallow and evenly punctate; dark dorsal vitta of constricted type (fig. 212); lateral vitta enclosing humeral apex constricted at post-humeral region (fig. 213); dorso-elytral border ending in a blunt small point. Scutellum rounded, pubescent at sides.

Front legs with protruding trochanter, femur basally rugose, wrinkles smooth, concentric; mid femur attaining metasternal border, when articulated parallel to body axis.

Metasternum shiny, with few setae, glabrous at sides except for a short posterior portion; metasternal infolding separated from abdominal median junction by a plane, ungrooved area. Abdomen shiny, with scattered setae; 7th sternite broadly curved (similar to females of other species).

Female: antenna almost as long as body, anterior trochanter not protruding anteriorly, front femur not sculptured, 7th abdominal sternite with a median notch.

Distribution: Brazil (State of Amazonas), Colombia (Bogota & Cali), and Nicaragua (type-locality).

Remarks and variation: A distinct species, by its curved front profile, the sulcate 3rd segment, the highly polished elytra, etc. The description and pictures are based on the British Museum specimen from Bogota (Cordillera Oriental), bearing a label of Nova Granada, a former name of Bogota. The specimen from Brazil, State of Amazonas, has the punctation denser and deeper. Both specimens (Bogota & Amazonas) have been compared to Bates' type by Lane at the British Museum (1961). The other 2 specimens from Cali (Cordillera Occidental) are darker, shinier, more robust and the punctures are reduced to tiny points, but otherwise the specimens agree well with the above description.

Specimens examined: Brazil, State of Amazonas, Taracua, 1937, A. Giacomo, female (SP). Colombia, Valle del Cauca, Cali, III-69, L. Denhez, male & female (SF); Cundinamarca, Bogota, no other data, male (BM).

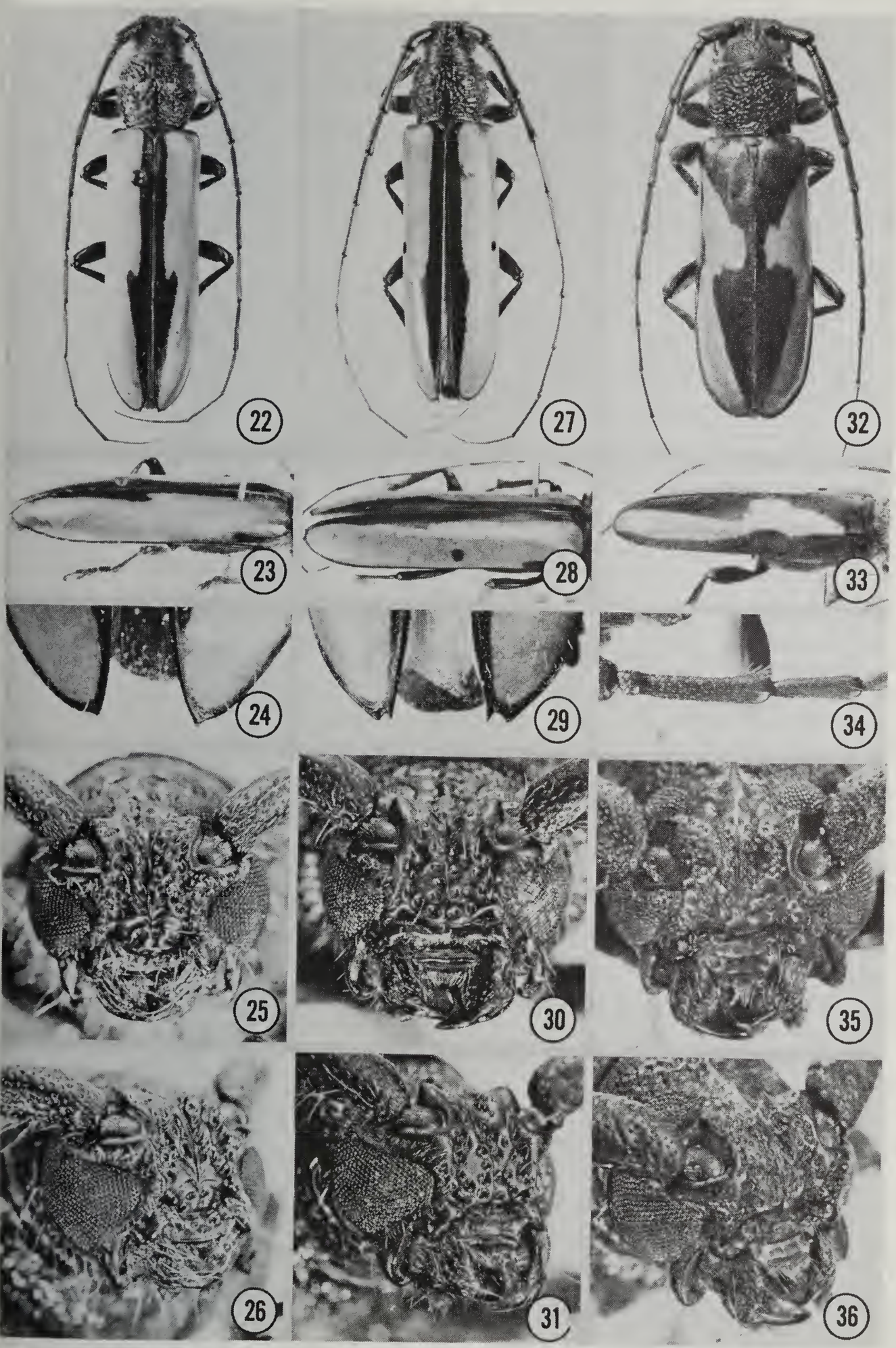

Fig. 22-26, *P. elegans* (Gory) male: 22) habitus (2x); 23) lateral vitta (1.9x); 24) elytral apex (10x); 25, 26) head (7.8x); 27-31, *P. signatipennis* (Melzer) male: 27) habitus (1.9x); 28) lateral vitta (1.7x); 29) elytral apex (6.1x); 30 31) head (7.8x); 32-36, *P. melzeri* Lane, holotype male: 32) habitus (1.9x); 33) lateral vitta (1.8x); 34) 2nd, 3rd, & 4th antennal segments (4.5x); 34 35) head (7.1x).

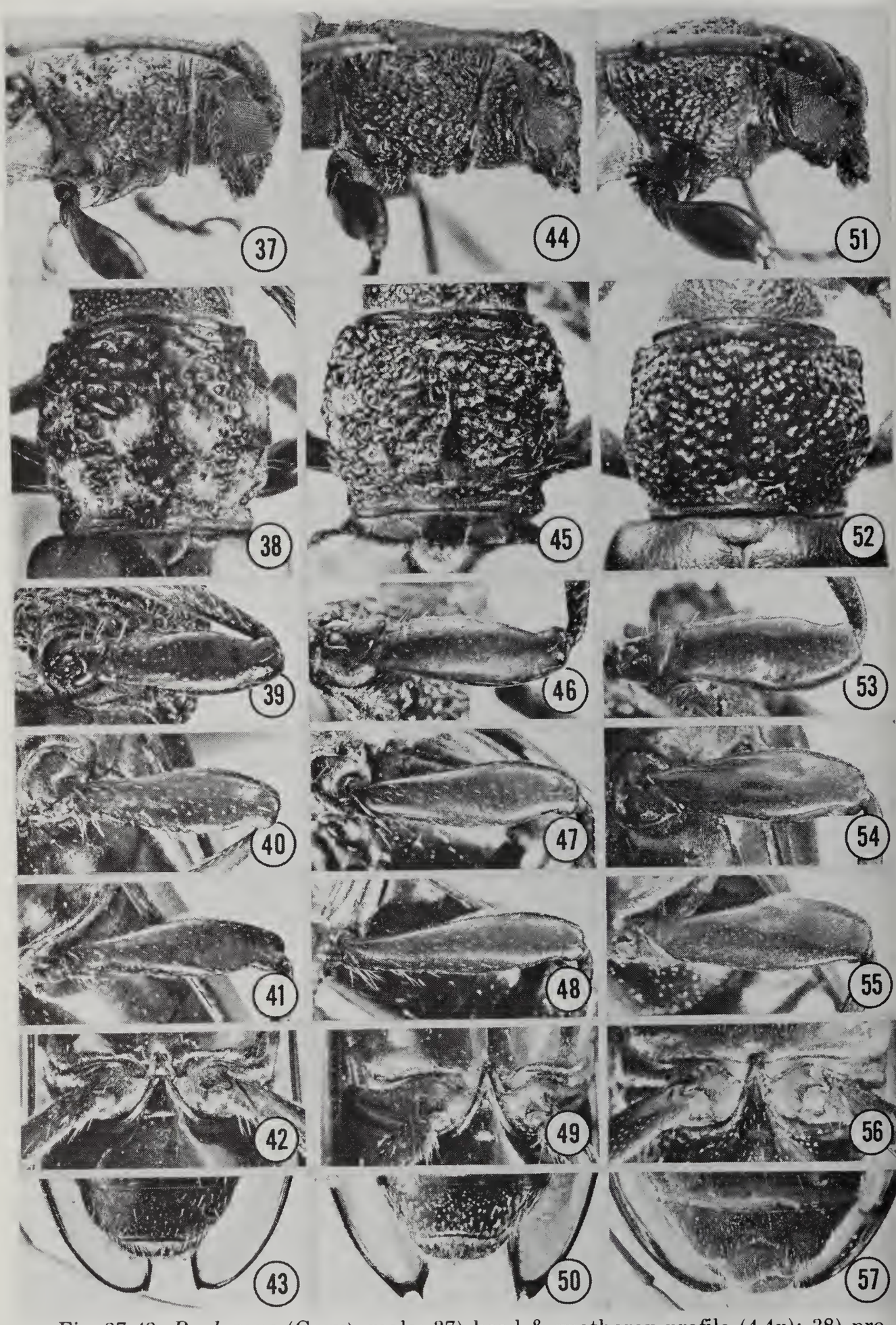

Fig. 37-43, *P. elegans* (Gory), male: 37) head & prothorax profile (4.4x); 38) pronotum (8.5x); 39, 40, 41) pro-, meso- & metafemur (5.5x); 42) metasternal infolding (5.5x); 43) 7th sternite; 44-50, *P. signatipennis* (Melzer), male: 44) head & prothorax profile, (4.2x); 45) pronotum (5.5x); 46, 47, 48) pro-, meso- & metafemur (5.6x); 49) metasternal infolding (5.6x); 50) 7th sternite; 51-57, *P. melzeri* Lane, holotype male: 51) head & prothorax profile (4.3x); 52) pronotum (5.4x); 53, 54, 55) pro-, meso- & metafemur (5.4x); 56) metasternal infolding (5.4x); 57) 7th sternite (5.4x).

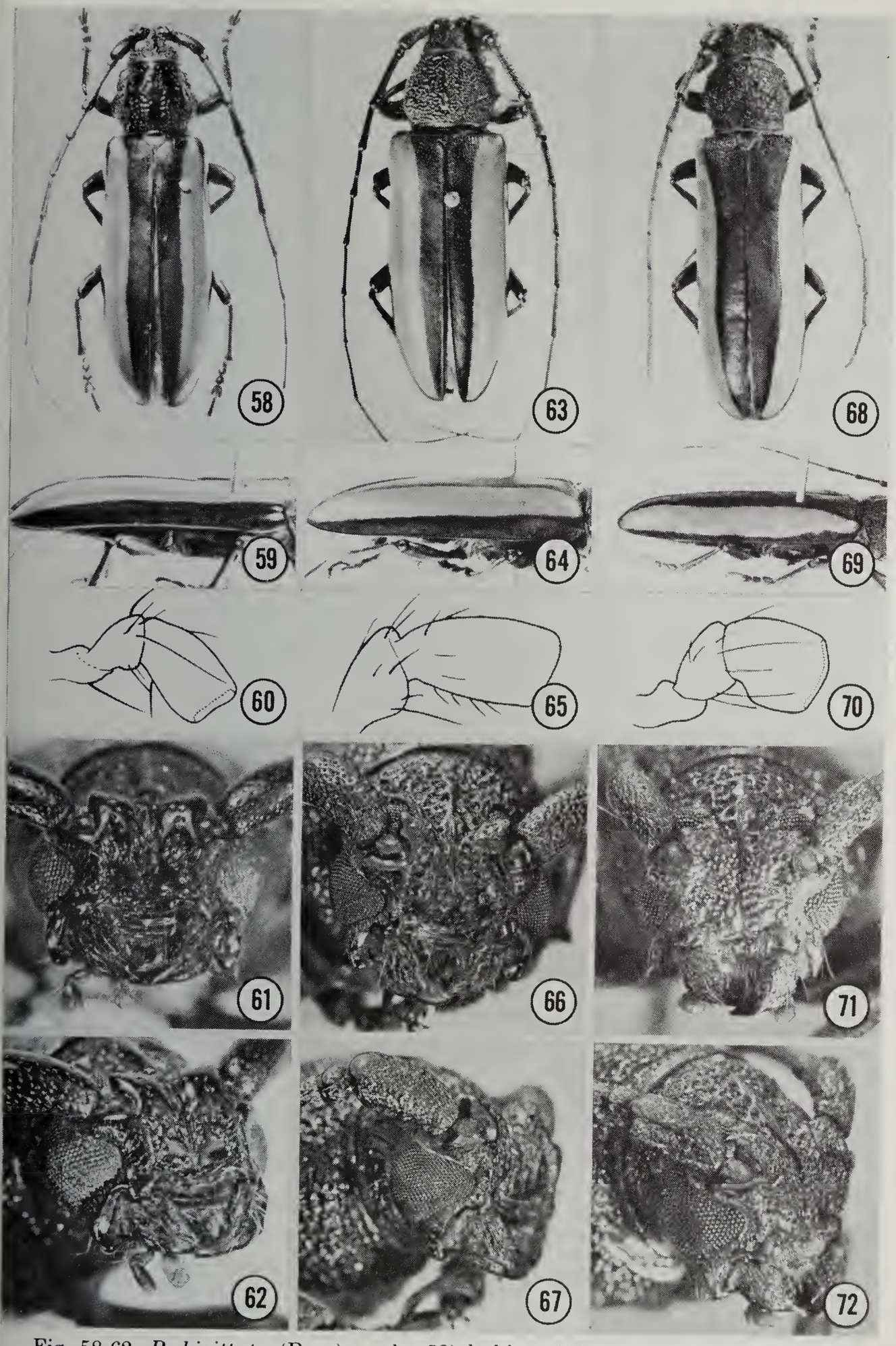

Fig. 58-62, *P. bivittata* (Buq.), male: 58) habitus (2.2x); 59) lateral vitta (2.3x); 60) labial palp (28.5x); 61, 62) head (7.8x); 63-67, *P. suturalis* (Perty), male: 63) habitus (1.5x); 64) lateral vitta (1.6x); 65) labial palp (30x); 66, 67) head (4.8x); 68-72, *P. travassossi* n. sp., holotype male: 68) habitus (2.4x); 69) lateral vitta (2.2x); 70) labial palp (28x); 71, 72) head (8.5x).

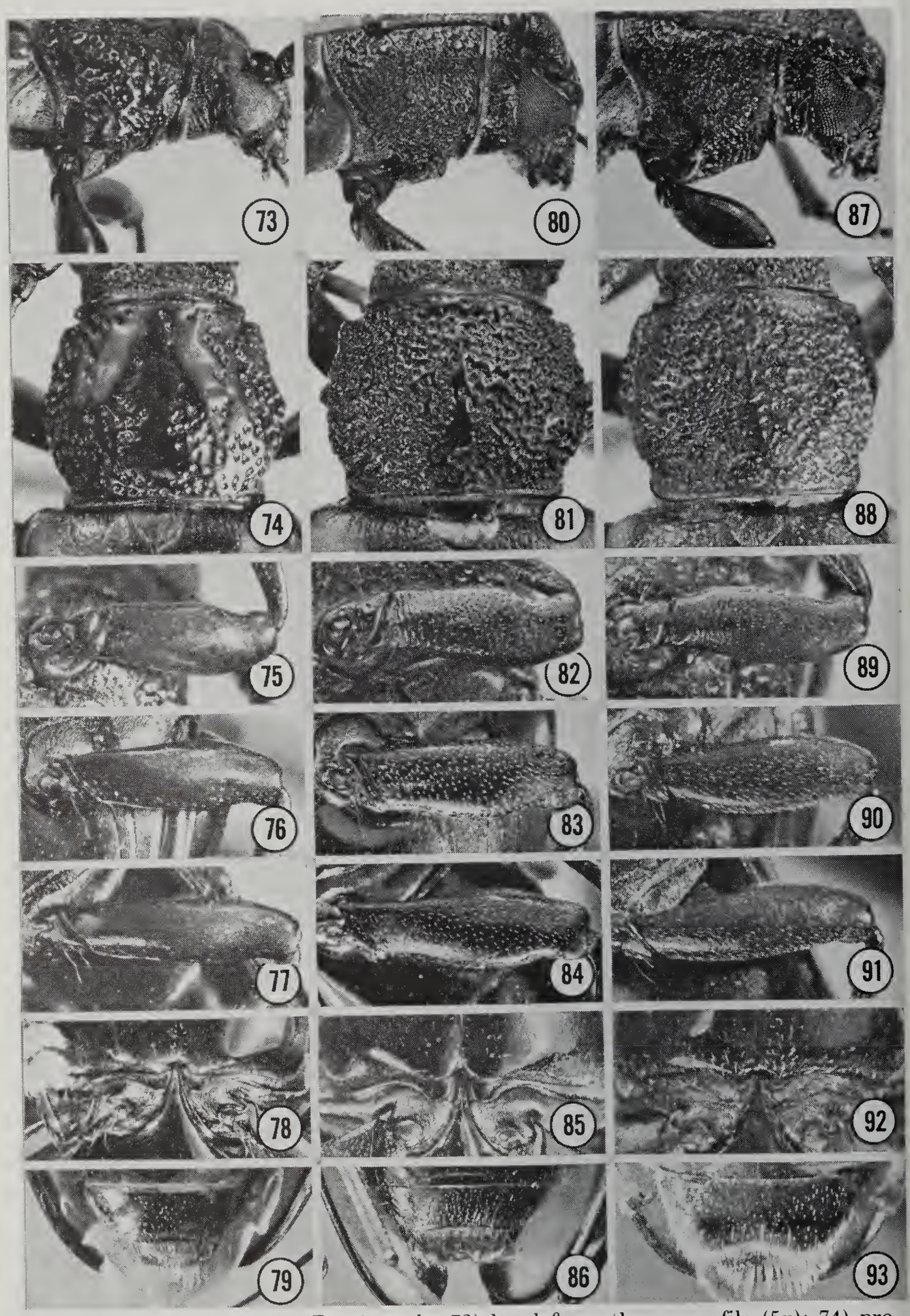

Fig. 73-79, *P. bivittata* (Buq.), male: 73) head & prothorax profile (5x); 74) pronotum (7x); 75, 76, 77) pro-, meso- & metafemur (6.3x); 78) metasternal infolding (6.3x); 79) 7th sternite (6.3x); 80-86, *P. suturalis* (Perty), male: 80) head & prothorax profile (3.6x); 81) pronotum (5.5x); 82, 83, 84) pro-, meso- & metafemur (4.6x); 85) metasternal infolding (4.6x); 86) 7th sternite (4.6x); 87-93, *P. travassossi* n. sp., holotype male; 87) head & prothorax profile (6x); 88) pronotum (7x); 89, 90, 91) pro-, meso- & metafemur (8.5x); 92) metasternal infolding (8.5x); 93) 7th sternite (8.5x).

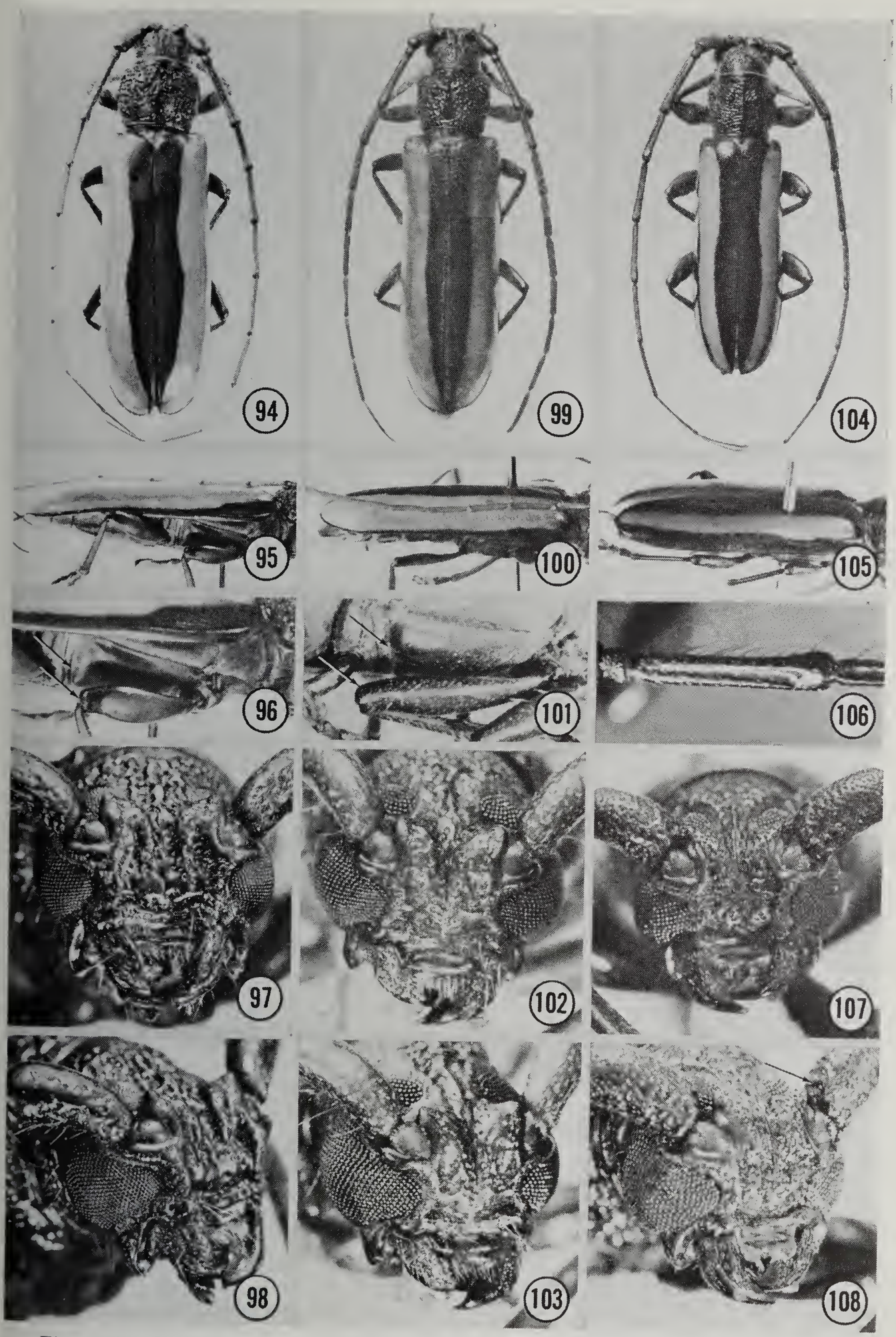

Fig. 94-98, *P. dorsalis* (Thoms.), male: 94) habitus (1.5x); 95) lateral vitta (1.3x); 96) relation metathorax/mesofemur (2.6x); 97, 98) head (5.3x); 99-103, *P. minuta* n. sp., holotype male: 99) habitus (2.3x); 100) lateral vitta (2x); 101) relation metathorax/mesofemur (7x); 102, 103) head (9x); 104-108, *P. lanei* n. sp., holotype male: 104) habitus (2.3x); 105) lateral vitta (2.5x); 106) 3rd antennal segment (6.7x); 107, 108) head (8.2x).

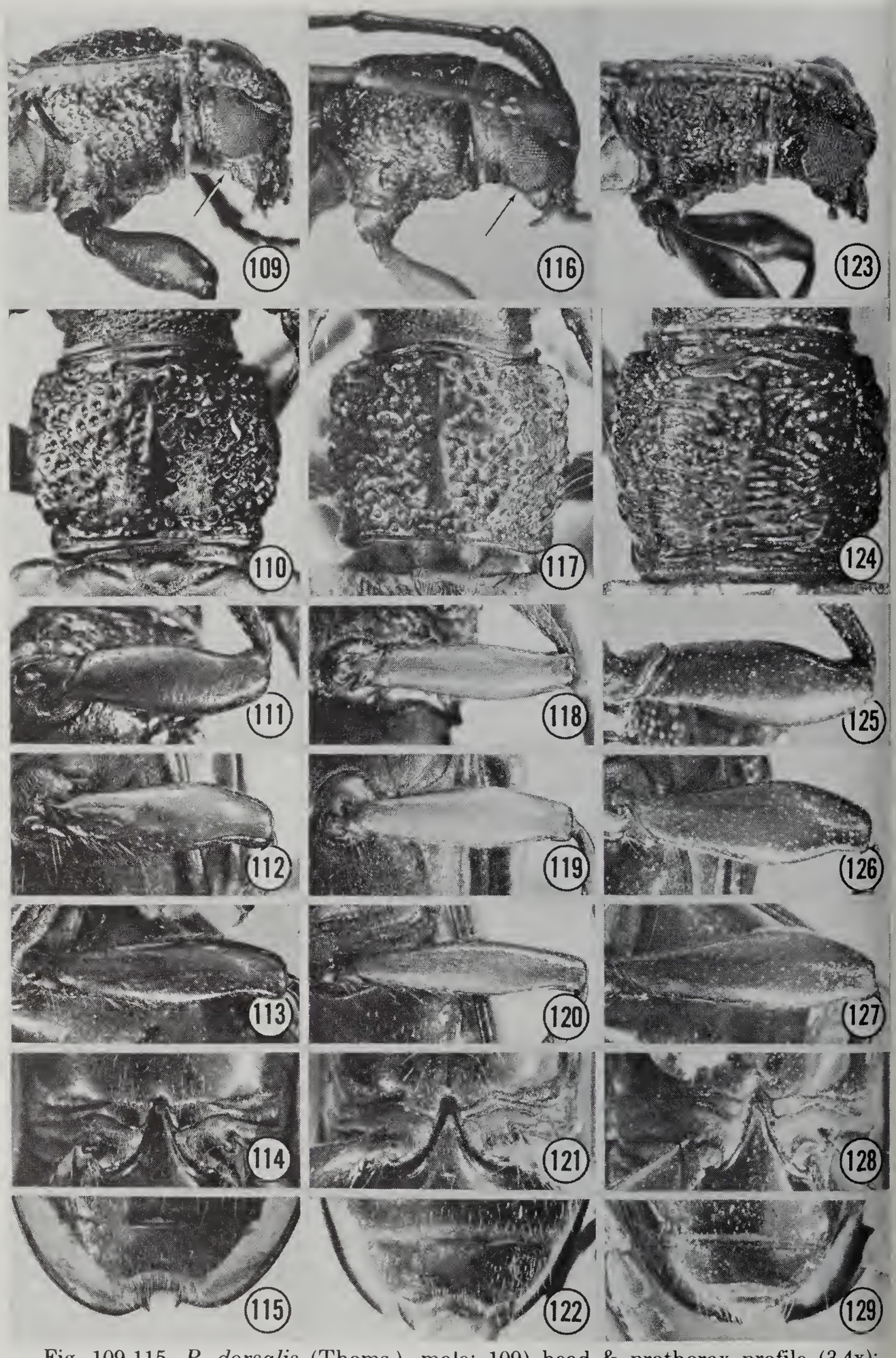

Fig. 109-115, *P. dorsalis* (Thoms.), male: 109) head & prothorax profile (3.4x); 110) pronotum (4.5x); 111, 112, 113) pro-, meso- & metafemur (4.6x); 114) metasternal infolding (4.6x); 115) 7th sternite; 116-122, *P. minuta* n. sp., holotype male: 116) head & prothorax profile (5.8x); 117) pronotum (7.6x); 118, 119, 120) pro-, meso- & metafemur (7.1x); 121) metasternal infolding (7.1x); 122) 7th sternite (7.1x); 123-129, *P. lanei* n. sp., holotype male: 123) head & prothorax profile (7x); 124) pronotum (9.5x); 125, 126, 127) pro-, meso- & metafemur (7.6x); 128) metasternal infolding (7.6x); 129) 7th sternite (7.6x).

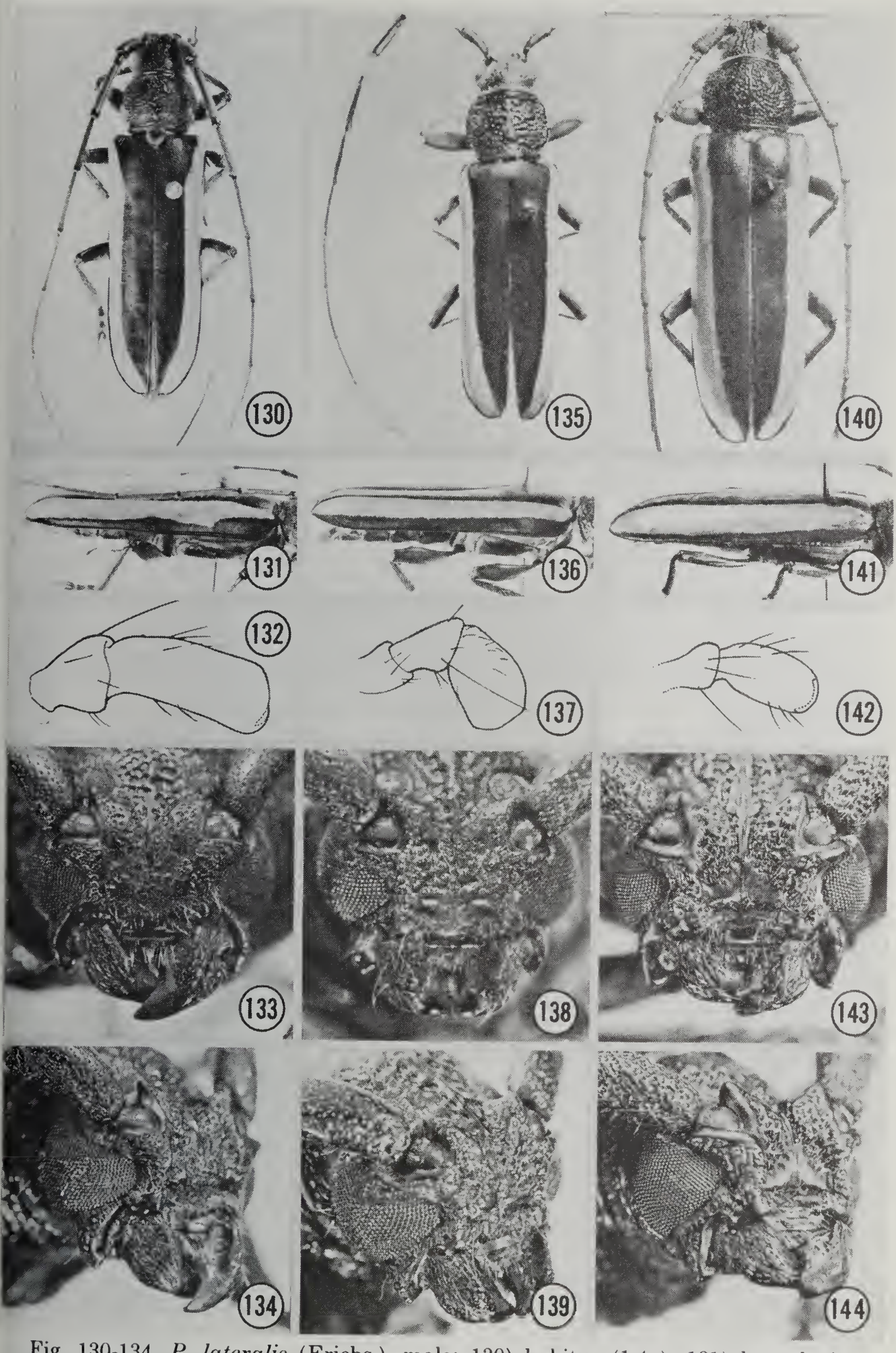

Fig. 130-134, *P. lateralis* (Erichs.), male: 130) habitus (1.4x); 131) lateral vitta (1.3x); 132) labial palp (50x); 133, 134) head (5x); 135-139, *P. ochrotaenia* (Bates), male: 135) habitus (1.9x); 136) lateral vitta (2x); 137) labial palp (32x); 138, 139) head (7.8x); 140-144, *P. parallela* n. sp., holotype male: 140) habitus (1.6x); 141) lateral vitta (1.4x); 142) labial palp (17.8x); 143, 144) head (6x).

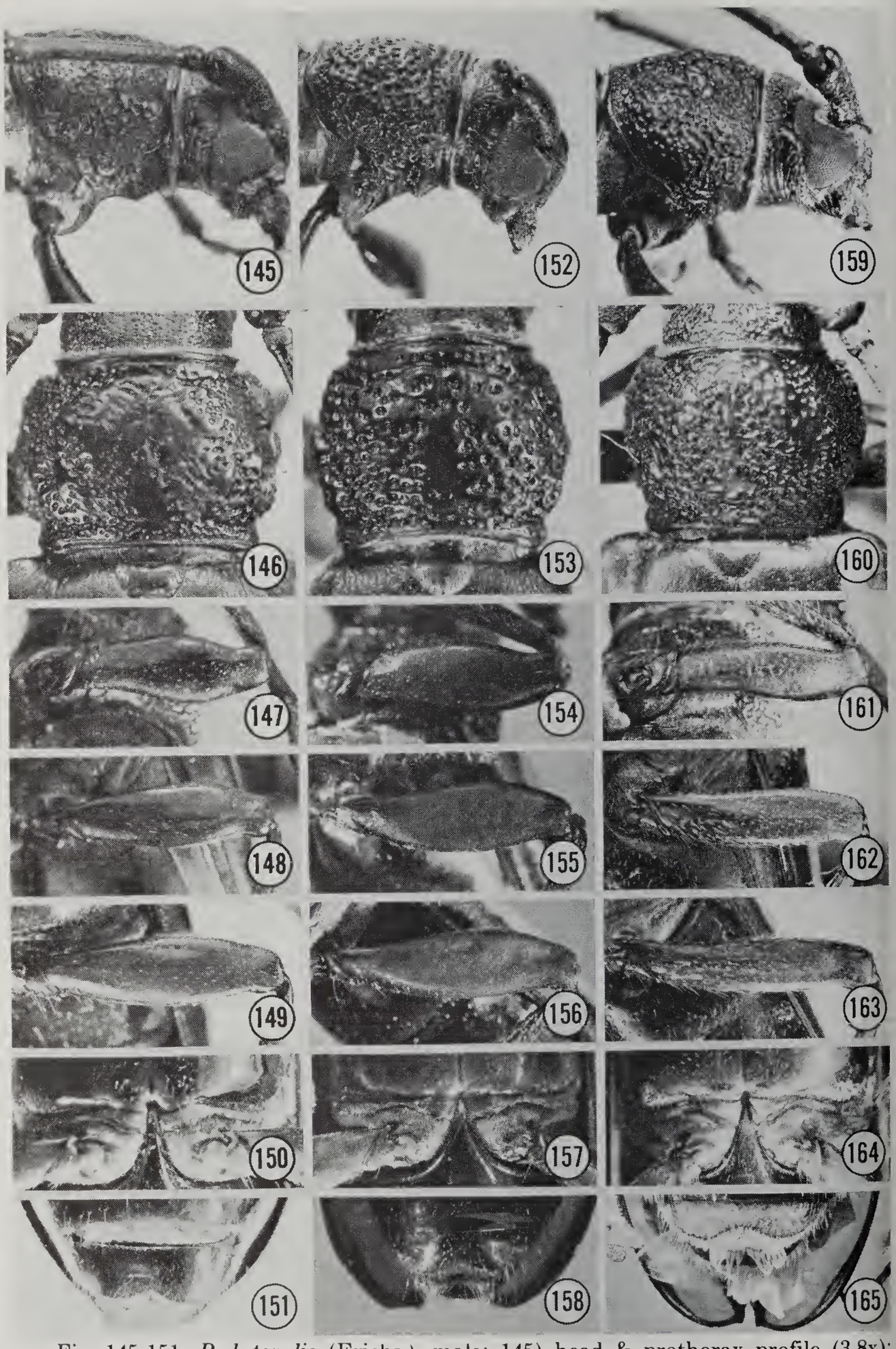

Fig. 145-151, *P. lateralis* (Erichs.), male: 145) head & prothorax profile (3.8x); 146) pronotum (4.8x); 147, 148, 149) pro-, meso- & metafemur (4.1x); 150) metasternal infolding (4.1x); 151) 7th sternite (4.1x); 152-158, *P. ochrotaenia* (Bates), male: 152) head & pronotum profile (4.7x); 153) pronotum (6x); 154, 155, 156) pro-, meso- & metafemur (6x); 157) metasternal infolding (6x); 158) 7th sternite (6x); 159-165, *P. parallela* n. sp., holotype male: 159) head & prothorax profile (3.6x); 160) pronotum (4.6x); 161, 162, 163) pro-, meso- & metafemur (4.2x); 164) metasternal infolding (4.2x); 165) 7th sternite (4.2x).

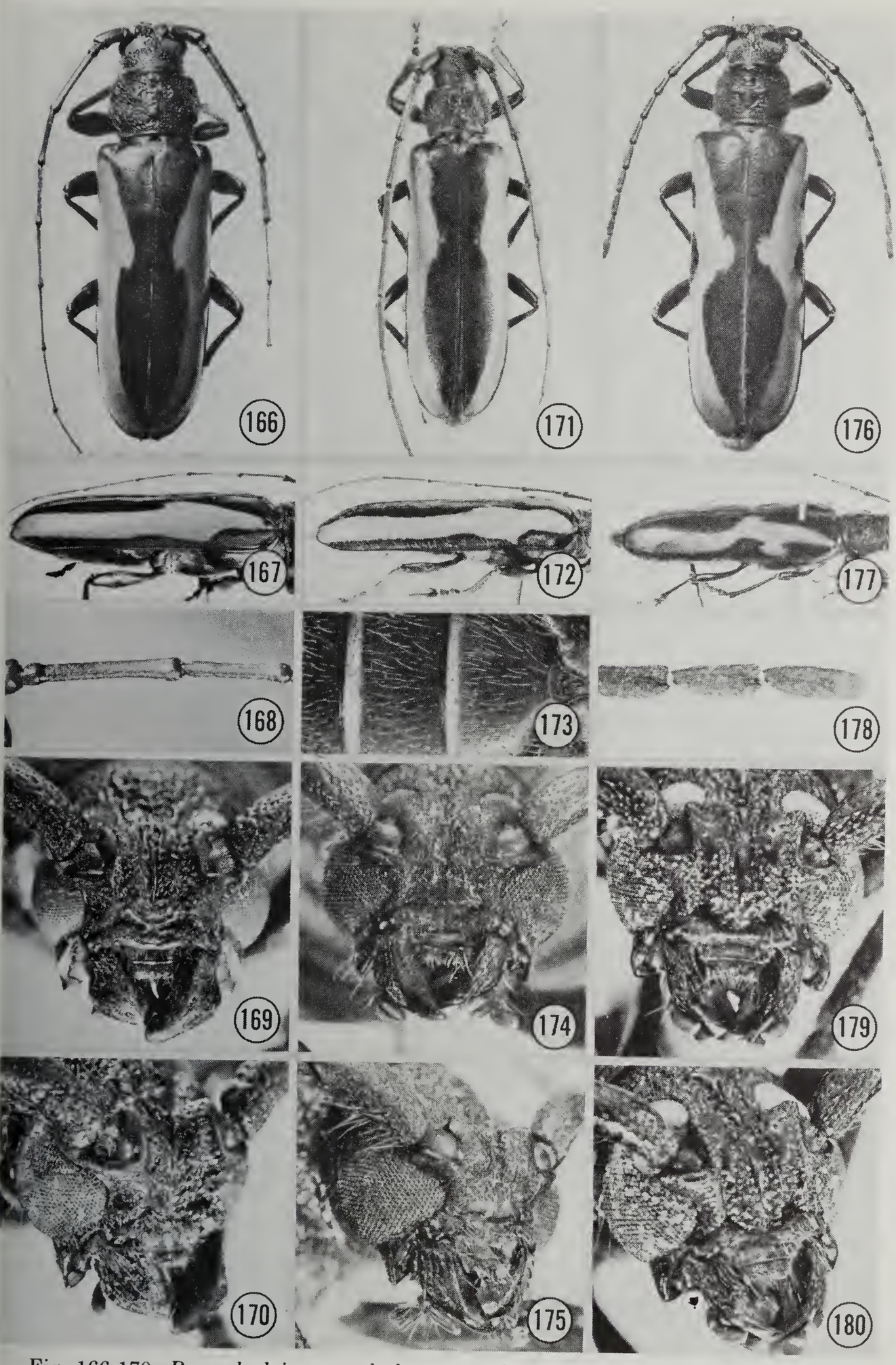

Fig. 166-170, *P. carlyslei* n. sp., holotype male: 166) habitus (1.7x); 167) lateral vitta (1.5x); 168) 2nd, 3rd & 4th antennal segments (3.6x); 169, 170) head (6x); 171-175, *P. hirsutiventris* n. sp., holotype male: 171) habitus (1.8x); 172) lateral vitta (1.7x); 173) abdominal surface (5.8x); 174, 175) head (7.5x); 176-180, *P. rugosicollis* n. sp., holotype female: 176) habitus (1.8x); 177) lateral vitta (1.3x); 178) 9th, 10th & 11th antennal segments (9.5x); 179, 180) head (7.9x).

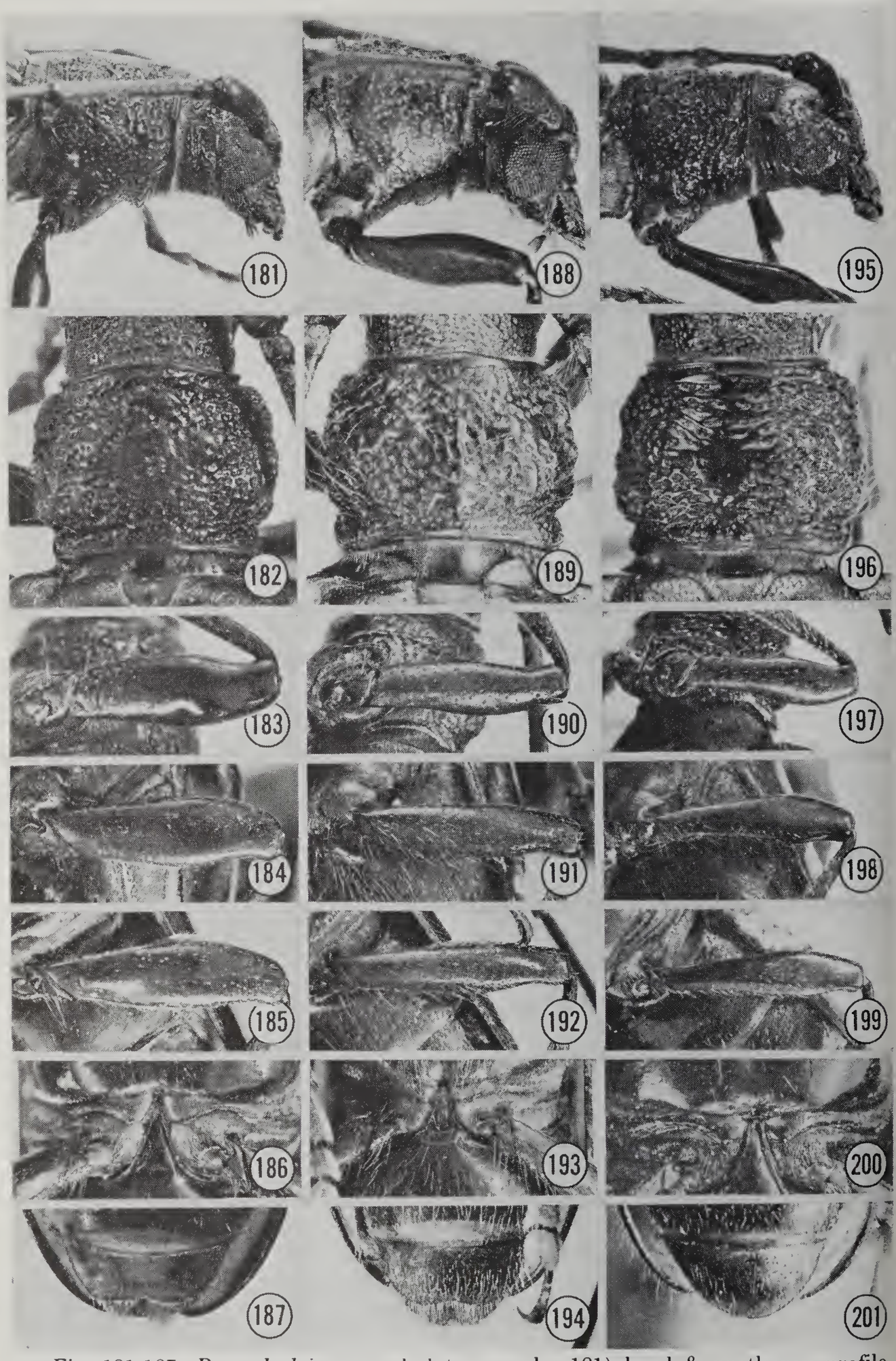

Fig. 181-187, *P. carlyslei* n. sp., holotype male: 181) head & prothorax profile (3.6x); 182) pronotum (5x); 183, 184, 185) pro-, meso- & metafemur (5x); 186) metasternal infolding (5x); 187) 7th sternite (5x); 188-194, *P. hirsutiventris* n. sp., holotype male: 188) head & prothorax profile (5x); 189) pronotum (7x); 190, 191, 192) pro-, meso- & metafemur (5.3x); 193) metasternal infolding (5.3x); 194) 7th sternite (5.3x); 195-201, *P. rugosicollis* n. sp., holotype female: 195) head & prothorax profile (4.8x); 196) pronotum (6.4x); 197, 198, 199) pro-, meso- & metafemur (4.8x); 200) metasternal infolding (5.7x); 201) 7th sternite (4.5x).

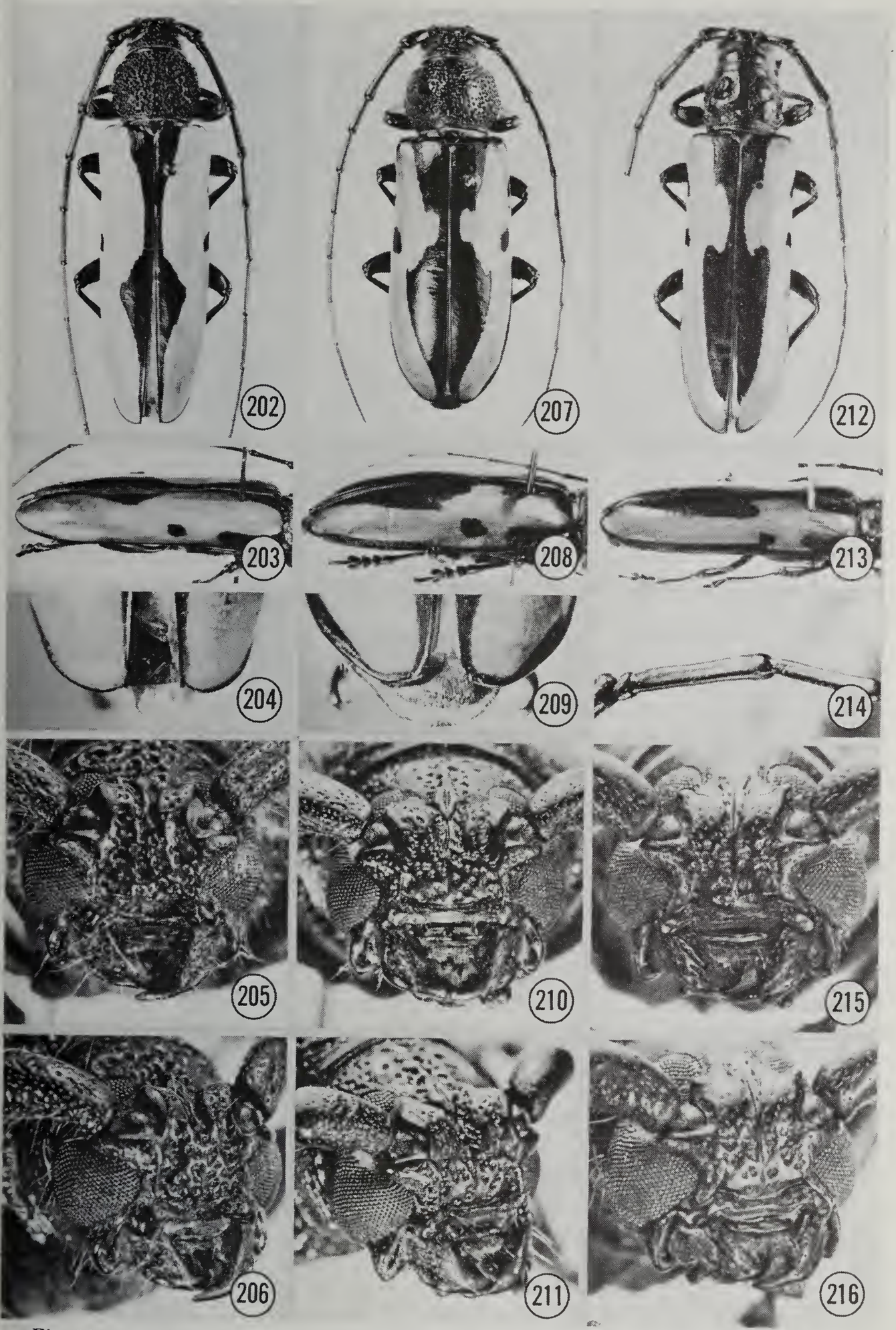

Fig. 202-206, *P. paraensis* Lane, male: 202) habitus (1.6x); 203) lateral vitta (1.4x); 204) elytral apex (6.1x); 205, 206) head (6.1x); 207-211, *P. lanceolata* n. sp., holotype male: 207) habitus (1.8x); 208) lateral vitta (1.7x); 209) elytral apex (5.8x); 210, 211) head (6.4x); 212-216, *P. sagittaria* (Bates), male: 212) habitus (1.8x); 213) lateral vitta (1.6x); 214) 2nd., 3rd & 4th antennal segments (4.8x); 215, 216) head (8x).

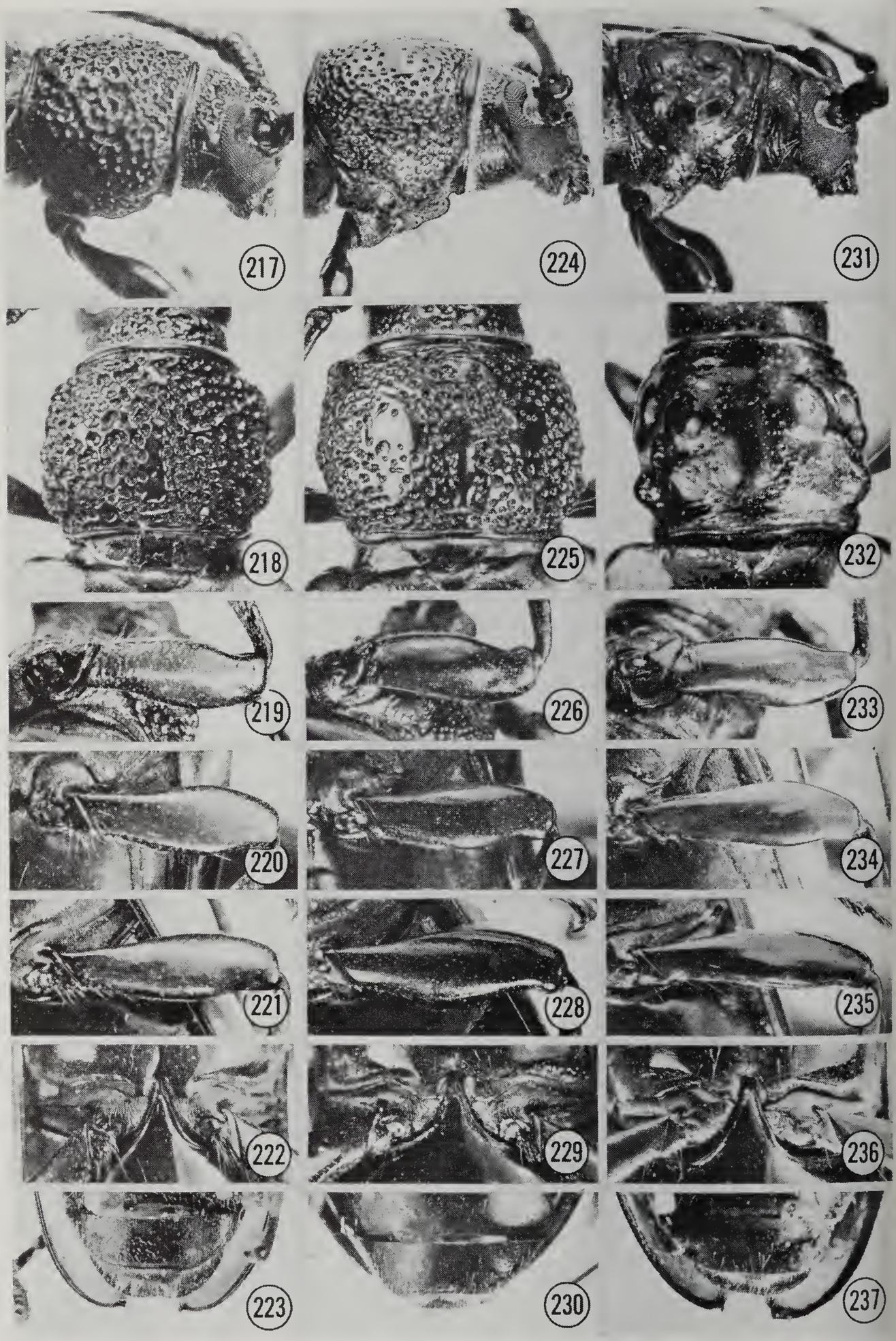

Fig. 217-223, *P. paraensis* Lane, male: 217) head & prothorax profile (3.9x); 218) pronotum (4.1x); 219, 220, 221) pro-, meso- & metafemur (4.5x); 222) metasternal infolding (4.5x); 223) 7th sternite (4.5x); 224-230, *P. lanceolata* n. sp., holotype male: 224) head & prothorax profile (4.5x); 225) pronotum (5.2x); 226, 227, 228) pro-, meso, & metafemur (5.1x); 229) metasternal infolding (5.1x); 230) 7th sternite (5.1x); 231-237, *P. sagittaria* (Bates), male: 231) head & prothorax profile (4x); 232) pronotum (5.4x); 233, 234, 235) pro-, meso- & metafemur (5.8x); 236) metasternal infolding (5.8x); 237) 7th sternite (5.8x).

Poeciloxestia travassosi Fragoso, **new species**

Description: Male holotype, head integument reddish, scabrous-punctate, dorsal punctures about same size as on pronotum, smaller on vertex and frons, with a median ridge-like structure between upper lobes of eyes; fronto-axial line arising deeply between antennal sockets, dividing frons and ending at post-clypeus; frons with shallow lateral depressions, scabrose-punctate, frontal plate indistinct (i.e., at same frontal plane defined by fronto-lateral edges); genal pit separate from lower lobe of eye; post-clypeus depressed medially. Labrum before fold about same color and height of ante-clypeus; mandibles simply broadly elevated in place of usual median ridge, punctate rugose, not excavate inward, shallowly grooved laterally, sparsely setose; maxillary palp distal segment broadened and flattened (fig. 70), similar to last labial segment. Gular plate matte, setose; ventral head surface with a trapezoidal area of different sculpture. Posterior eye contour parallel to frontal plane.

Antenna shorter than body, scape scabrous-punctate, except at apex; segments 2+3 are 1.7 times 4th; 4 slightly shorter than 5th; 5 to 10 sub-equal in length; 11 longer, with distinct traces of fusion of a 12th. Scars: dorsally, a few sub-apical punctures on 4th; slightly longer than half on 5th, complete on 6th; ventrally, shorter than half on 3rd, complete from 4th onward.

Prothorax scabrous-punctate except along a notal median irregular longitudinal area. Prosternum bulged immediately behind anterior constriction.

Elytra coriaceus, basally more deeply punctate, punctures diminishing in size and depth toward apex; dorsal vitta (fig. 68) sinuous, darker in outer contours, wider basally and ending before apex; lateral vitta (fig. 69) wider at post-humeral area then narrowing and continuing sub-parallel to margin, ending before apex: dorso-elytral border ending in a blunt tubercle: humerus on ochraceous background. Scutellum pubescent, rounded.

Legs: front femur deeply depressed basally, mid femur not attaining metasternal infolding when articulated parallel to body axis; mid and hind femora distinctly more flattened than front femora.

Metasternum shiny, pubescent at sides, other setae scattered, metasternal infolding connected with thoraco-abdominal median junction by a groove which broadens medially.

Abdomen shiny, with a few scattered setose punctures, and more numerous minutely hairy smaller punctures; 7th sternite bisinuous.

Holotype, male: Brazil, State of Sao Paulo, Ribeirao Preto, X-1953, Travassos & Barreto (SF). Measurements: elytral length 16mm; humeral distance 5.4mm; pronotal anterior margin 3.2mm; pronotal posterior margin 3.7mm; pronotal length 3.8mm. Scape 1.6mm; 2+3rd seg. 2.9mm; 4th seg. 1.7mm; 5th seg. 1.8mm. Front femur 3.2mm; mid femur 3.5mm; hind femur 3.7mm.

Female: antenna sub-equal to male in length, distinguished by 7th abdominal sternite rounded.

Allotype, female: Brazil, State of Sao Paulo, Ribeirao Preto, X-1953 Travassos & Barreto (SF). Measurements: elytral length 17.4mm; humeral distance 6.1mm; pronotal anterior margin 3.6mm; pronotal posterior margin 4.0mm; pronotal length 3.9mm. Scape 1.8mm; 2+3rd seg. 3.25mm; 4th seg. 1.9mm; 5th seg. 2.1mm. Front femur 3.8mm; mid femur 4.1mm; hind femur 4.4mm.

Distribution: Brazil, States of Mato Grosso, Parana and Sao Paulo.

Remarks and variation: If not teratological, the antennal length shorter than the body is an exceptional character among the Neotropical representatives of the tribe. I have found *travassosi* n. sp. under drawer labels of *dorsalis* Thoms., from which it is readily distinguished by the general smaller size, bulged prosternum and the uniquely flattened frons and broadened groove which links the metasternal infolding to the abdominal junction. The specific name is dedicated to the late Prof. Lauro Pereira Travassos.

Specimens examined: (holotype, allotype & following 17 paratypes): Brazil,

State of Mato Grosso, Sete Lagoas (1SP); State of Parana, Arapoti (2CS), Chachoeirinha (3USNM); State of Sao Paulo, Ribeirao Preto (5FIOC, 2SF, 1SP).

Poeciloxestia suturalis (Perty 1832), **new combination**

Stenochorus suturalis, Perty 1830:90, pl. 18, fig. 5
(nec *Hamaticherus suturalis* Gory 1832, classe IX, pl. I)
(nec *Criodion bivittatum* Buquet 1852:356)
Xestia suturalis, Gahan 1892:32
Coleoxestia bivittata, Aurivillius 1912:64
Coleoxestia bivittata, Blackwelder 1946:561
Coleoxestia bivittata, Zajciw 1967:199

Description: Male, head integument black, scabrous-punctate, median raised ridge usually indistinct, reduced in some specimens to an impunctate irregular line; fronto-axial suture visible from between antennal socket bases, dividing partially frons, indistinct at lower portion of frontal plate; fronto-lateral depressions small, deeply punctate; fronto-lateral ridges usually higher than frontal plate which is distinct, lower portion impunctate; genal pit separate from lower lobe of eye; post-clypeus ridge-like, more or less depressed at mid portion in different specimens. Labrum before creased fold shorter than ante-clypeus; mandibles shiny, shortly ridged, excavate inward, grooved outward; distal segment of maxillary palp sub-equal to last labial segment, somewhat variable in shape from specimen to specimen. Gular plate short, linear in some specimens not distinctly delimited posteriorly, setose; ventral head area rugose, wrinkles flattened medially.

Antenna longer than body, scape scabrous-punctate almost to apex; segments 2+3 about 1.5 times 4th; 4 slightly shorter than 5th. Scars: dorsally, a few apical punctures on 5th, shorter than half on 6th, complete on 7th; ventrally, an apical spot on 3rd, about half on 4th, complete on 5th.

Prothorax scabrous-punctate, dorsally with a median irregular impunctate area (fig. 81), distinctly bulged ventrally (fig. 80), tuberculate on each side.

Elytra coriaceus, shallowly punctate; dark dorsal vitta (fig. 63) sinuose or subparallel to dorso-elytral margins, usually slightly widened basally, ending at apex; lateral vittae parallel to margin (Fig. 64), humeral apex on dark background; dorso-elytral margins ending in a blunt point. Scutellum variable in shape, usually rounded, transverse.

Front leg with tumid trochanter, femur usually with a small basal depression; mid femur bypassing metasternal border.

Metasternum shiny, pubescent at sides, with a few other setae, metasternal infolding connected with thoraco-abdominal junction by a shallow curved sulcus (fig. 85), sometimes reduced to a depressed line.

Abdomen shiny, sparsely setose; 7th sternite bisinuous or subtruncate.

Female: antenna as long as body, sometimes a bit longer; 7th abdominal sternite usually truncate, with a median notch, trochanter less tumid than in males.

Distribution: Argentina (Prov. of Jujuy, Salta & Tucuman), Bolivia (Dept. of Santa Cruz), Brazil (States of Mato Grosso, Minas Gerais, Rio Grande do Sul, & Sao Paulo).

Remarks and variation: Perty described *suturalis* from "Serra do Caraça, Prov. Minarum" in his Delectus Animalium Articulatorum, page 90, usually dated as 1830. According to Horn (1928:932) and Blackwelder (1957:1230), pages 61 to 124 were published in 1832, fasciculus 2, in spite of Blackwelder citation (1946:61): "*suturalis* Perty 30:90."

Gahan (1892:31) parenthetically synonymized *suturalis* Perty with *bivittata* Buquet 1852, not stating his reasons for doing so, among the transference to *Xestia* of some species formerly in *Criodion*. *Hamaticherus suturalis* Gory 1832 (=*Criodion fleistameli* Buquet 1852) was not mentioned, and, according to the generic definition herewith adopted, does not belong to *Poeciloxestia*.

Poeciloxestia suturalis (Perty) is distinct from *bivittata* (Buquet) by the black integument, the scabrose-punctate pronotum which is laterally tuberculate, the coriaceus elytra, the sculptured black femora, etc. It is a more common species in collections, widely distributed and variable in size (elytral length: 11-22mm). The smaller specimens are shinier. The scutellum is remarkably variable, from sub-triangular to sub-ellipsoid shape, but always wider than long.

Specimens examined: Argentina, Prov. Jujuy, Cerro Perales (1); Prov. Salta, El Naranjo (1); Prov. Tucuman, Burruyacu (5), San Pedro Colalao (4). Bolivia, Dept. of Santa Cruz, Buena Vista (1). Brazil, State of Bahia, km 965 Estrada Rio-Bahia (10); State of Mato Grosso, Barra do Tapirape (2), Chapada dos Guimaraes (2), Rio Verde (12), Rosario Oeste (7), Xingu Nat. Park, Jacare (2), Salobra (1), Utiariti, Rio Papagaio (5); State of Minas Gerais, Belo Horizonte (1), Lavras (4), Pedra Azul (1); State of Rio Grande do Sul, no other data (1); State of Sao Paulo, no other data (1), Araçatuba (1), City of Sao Paulo (1), Orlandia (1).

Poeciloxestia bivittata (Buquet, 1852), **new combination**

Criodion bivittatum, Buquet 1852:356
Criodion bivittatum, Lacordaire 1869:271
Criodion bivittatum, Gemminger & Harold 1872:2806
Xestia bivittata, Gahan 1892:32
Coleoxestia bivittata, Aurivillius 1912:64
Coleoxestia bivittata, Blackwelder 1946:561
Coleoxestia omega Zajciw 1967:199, *new synonym*

Description: Male, head integument dark brown, shiny, scabrous-punctate with a median irregular ridge between upper lobes of eyes; fronto-axial line visible on inter-ocular ridge, gradually attaining frontal plane, dividing frons, and ending at post-clypeus; fronto-lateral ridges slightly elevated; frontal plate upper contours irregular, with an impunctate area at each side of axial line; genal pit separated from lower lobe of eye; post-clypeus ridge-like, somewhat depressed at mid portion. Labrum before creased fold longer than ante-clypeus; mandibles shiny, with ovoid punctures, grooved outward, gradually deeper inward, not excavate; distal segment of maxillary palp with curved sides, similar to last labial segment. Gular plate punctate setose, shiny as ventral head surface, which is rugose, with wrinkles flattened medially.

Antenna longer than body, scape evenly punctate, except at apex; segments 2+3 approximately 1.8 times 4th; 4 slightly shorter than 5th. Scars: dorsally, a small sub-apical spot on 5th, complete on 6th; ventrally a small, puncture-like on 3rd, shorter than half on 4th, complete on 5th.

Prothorax dorsally punctate, punctures spaced, with a wide impunctate discal area (fig. 74), laterally callose; prosternum subscabrous, bulged or semi-bulged (see remarks and fig. 73). Elytra shiny, with shallow small punctures evenly distributed, dark dorsal vitta sinuous, ending at apex; lateral vittae sub-parallel to margin (fig. 59), humerus on dark background.

Legs with femora shiny, distinctly lighter and redder than pronotum, with apices slightly darkened; front femur with a basal depression; mid femur attaining metasternal border, when articulated parallel to body axis.

Metasternum shiny, as light and reddish as femora except at anterior and lateral borders sparsely setose, sides glabrous, except at posterior portion; metasternal infolding connected to thoraco-abdominal median junction by a distinct sulcus.

Abdomen shiny, with few long setae, 7th sternite truncate at apex.

Female: similar to male, antenna slightly shorter than body, 7th abdominal sternite broadly curved.

Distribution: Brazil (States of Rio de Janeiro and Santa Catarina).

Remarks and variation: Gahan (1892:31) treated this species as a subjective synonym of *Stenochorus suturalis* Perty (see Remarks and variation under *P. suturalis),* although the 2 species are distinct. Apparently led by this erroneous synonymy and

ignoring Buquet's diagnosis, Zajciw (1967:199) described *omega* based on 2 female specimens (both from Itatiaia National Park) which, according to his own statement, had previously been labelled by J. F. Zikan as "new species." Zajciw's description is strikingly similar to Buquet's (1852:356): "Dessous du corps et pattes d'un brun fonce avec les cuisses rougeatres" . . . which is enough to distinguish *bivittata* from *suturalis*. In 1973, I compared Zajciw's holotype (in F10C) to a color slide of Buquet's "typus" (taken at MNHN and made available through the courtesy of Pe. J. S. Moure), and they match in every observable detail.

The female pronotum, in all specimens examined, is distinctly more bulged than in the single male available. Based upon the few specimens with informative data, *bivittata* occurs in localities above 700 meters.

Specimens examined: Brazil, State of Rio de Janeiro, Itatiaia, 700m, XI-74, M. Monne, male (SF), XI-35, FJ. Zikan, holotype, female (FIOC), X-35, J. Zikan, paratype, female (FIOC); State of Santa Catarina, Sao Bento, 800m, XI-66, A. Maller, female (CS).

Poeciloxestia paraensis Lane, 1965

Poeciloxestia paraensis, Lane 1965:274

Description: Male, head integument dark reddish-brown, deeply scabrous punctate dorsally, with a median irregular ridge-like structure behind antennal tubercle bases, punctures on vertex and frons shallower and smaller; fronto-axial line arising at vertex, dividing frons, ending before post-clypeus; frons with shallow lateral depressions, frontal plate sparsely and irregularly punctate, at same plane of lateral ridges, not excavate outward; genal pit sub-contiguous to innermost portion of lower lobe of eye; post-clypeus ridge-like, depressed medially. Labrum before creased fold slightly shorter than ante-clypeus; mandibles with basal ridges defined only by inward excavate portion, punctate, shallow grooved laterally; maxillary palp distal segment with sides opposedly curved, similar in shape and length to last labial segment. Gular plate punctate-setose, punctures poorly defined; ventral head surface rugose, wrinkles flattened medially. Posterior eye contour smoothly curved.

Antenna longer than body, scape basally scabrous-punctate, punctures gradually separating toward apex; segments 2+3 about 1.6 times 4th; 4 slightly shorter than 5th. Scars: dorsally a small subapical spot on 5th, less than half on 6th, complete on 7th; ventrally, distal spots on 3rd and 4th, complete on 5th.

Prothorax deeply scabrous-punctate, except along a median dorsal irregular portion. Prosternum bulged immediately behind anterior constriction.

Elytra shiny, sub-coriaceus, punctures minute, evenly distributed; dark dorso-elytral vitta of the constricted type (fig. 202); lateral vittae occupying post-humeral area, then confined to margin; a supramedian lateral dark spot on ochraceous background present, variable in size; color boundaries usually meet at humeral apex. Scutellum cardiform, pubescent at borders.

Legs distinctly lighter (redder) than prothorax, front femur with tumid trochanters, not depressed; mid femur attaining metasternal border when articulated parallel to body axis.

Metasternum shiny, feebly pubescent at sides, same color as legs, with a few setae; metasternal infolding not connected with thoraco-abdominal median junction.

Abdomen shiny, reddish as metasternum, with a few sparse setae; 7th sternite truncate.

Female: antenna as long as body, 7th abdominal sternite broadly curved.

Distribution: Brazil (State of Para), French Guiana, Trinidad Island, and Venezuela.

Remarks and variation: Lane (1965:277), due to a typographical error, referred to the holotype as a male, but the specimen is undoubtedly a female, as can be read at the beginning of the original description. In the comments, he mentioned that the holotype had been identified by Melzer as *sagittaria* Bates (his label is still attached

to the specimen). Most species with a constricted type of dorsal vitta bear apocryphal labels as *sagittaria,* due perhaps to the figure published in the Biologia Centrali Americana (Bates, 1880, pl. 3, fig. 9). See also remarks under closely related *lanceolata* n. sp.

Specimens examined: Brazil, State of Para, Obidos, XI-07, B. Pohl, holotype, female (CS). French Guiana, Cayenne, no date, male (USNM). Trinidad Island, VI-57 & VI-58, females (SF). Venezuela, no other data, female (USNM), Luepa VI-70, A. Veras, female (SF), Rancho Grande, VI-57, F. Yepes, female (CS).

Poeciloxestia lanceolata Fragoso, **new species**

Description: Male holotype, head integument shiny black, scabrous-punctate, with a median ridge-like structure, widened behind antennal tubercles; fronto-axial line visible dorsally on ridge, deeply separating antennal tubercle bases, almost indistinct frontally; fronto-lateral depressions shallow; fronto-lateral ridges only distinct latero-posteriorly, not excavate outward; frontal plate at lateral ridge level inferiorly well-delimited by a deep groove, surface sparsely punctate with irregular impunctate portions, somewhat tumid; genal pit sub-contiguous to innermost portion of lower lobe of eye; post-clypeus ridge-like, depressed medially. Labrum before creased fold half as short as ante-clypeus; mandibles shiny, punctures poorly defined, shallow, grooved outward, feebly excavate inward, with a distinct basal ridge; distal segment of maxillary palp with sides opposedly curved, sub-equal to last labial segment in shape and length. Gular plate punctate-setose, punctures poorly defined, surface matte; ventral head surface rugose, wrinkles flattened medially. Posterior eye contour smoothly curved.

Antenna longer than body, scape somewhat flattened dorsally, moderately punctate, a few basal punctures confluent, curved and conical in profile; segments 2+3 about 1.7 times 4th; 4 slightly shorter than 5th. Scars: dorsally, shorter than half on 5th, complete but medially discontinuous on 6th; ventrally, a small subapical spot on 3rd, longer than half on 4th, complete from 5th onward.

Prothorax scabrous-punctate, notal contours somewhat hexagonal, with irregular impunctate dorsal areas (usually suggesting a discal cross). Prosternum bulged immediately behind anterior constriction.

Elytra shiny as enamel, punctures minute, poorly defined and evenly distributed over entire surface; dark dorsal vitta constricted on medial third, forming a lanceolate pattern (fig. 207); lateral dark vittae occupying post-humeral area, then constricted and confined to margin (sometimes slightly wider than and parallel to margin, fig. 208); a supra-median lateral dark spot on ochraceous background present, dorso-elytral border angulose; humerus on dark background. Scutellum rounded, sparsely pubescent at borders.

Legs: front femur not depressed basally, trochanter slightly tumid, mid femur as long as metasternal border when articulated parallel to body axis.

Metasternum shiny, with scattered fine setae, almost glabrous at sides, pubescent posteriorly; metasternal infolding not connected with thoraco-abdominal median junction.

Abdomen shiny, with scattered fine setae; 7th sternite truncate.

Holotype, male: Mexico, X-can, Quintana Roo, VI-68, E. Welling (CIS). Measurements: elytral length 18.5mm; humeral distance 7.8mm; pronotal anterior margin 4.6mm; pronotal posterior margin 5.5mm; pronotal length 4.9mm. Scape: 2.2mm; 2+3rd seg. 4.3mm; 4th seg. 2.5mm; 5th seg. 2.8mm. Front femur 4.2mm; mid femur 4.6mm; hind femur 5.0mm.

Female: antenna shorter than body; 7th abdominal sternite broadly curved.

Allotype, female: Mexico, X-can, Quintana Roo, VI-67, E. Welling (CIS). Measurements: elytral length 18mm; pronotal anterior margin 3.7mm; pronotal posterior margin 4.6mm; pronotal length 4.3mm. Scape: 2.1mm; 2+3rd seg. 3.3mm; 4th seg. 1.7mm; 5th seg. 1.8mm. Front femur 4.0mm; mid femur 4.3mm; hind femur 4.6mm.

Distribution: Costa Rica, El Salvador, Panama and Mexico (States of Chiapas, Quintana Roo & Veracruz).

Remarks and variation: Closely related to *paraensis* Lane, from which it differs by the black integument, ventral surface evenly black, pronotal sculpture, etc. The dorso-elytral dark vitta shows considerable variation on its distal half, sometimes linked to the supra-median lateral spots.

Specimens examined (holotype, allotype & following 19 paratypes): Costa Rica, Cachi, no other data, male (USNM), Nicaya, VII-29, female (USNM). El Salvador, San Salvador, V-60, J. Bechyne, 2 females (CS), Volcan Conchagua, V-58, O. Cartwright, female (AMNH). Mexico, State of Chiapas, IX-63, G. Halffter, female (CS); State of Quintana Roo, X-Can, V-68 & V-69, 2 males, VI-67 & VI-69, 3 females, E. Welling (CIS); State of Veracruz, Cordoba, VI-63, female (CS), Cotaxla, VI-62, female (CIS), Dos Amates, V-64, Haffter & Reyes, female (CS), Missantla, no other data, female (USNM). Panama, Barro Colorado Island, females, V-40, J. Zetek (USNM), V-63, R. Akre (CIS), & V-29, Darlington (SP), La Chorrea, V-12, A. Busck, female (USNM).

Poeciloxestia elegans (Gory 1833), **new combination**

Xestia elegans, Gory 1833, (page not numbered) Classe IX, pl. 64
Xestia elegans, White 1853:134
Xestia elegans, Thomson 1860:192
Xestia elegans, Bates 1872:172
Xestia elegans, Gemminger & Harold 1872:2807
Coleoxestia elegans, Aurivillius 1912:64
Coleoxestia elegans, Blackwelder 1946:561

Description: Male, head integument dark reddish-brown, scabrous punctate, median ridge usually indistinct, fronto-axial line beginning deeply between bases of antennal tubercles, dividing frons, ending at post-clypeus; frons deeply scabrous-punctate, setose, at same level of fronto-lateral edges; fronto-lateral depressions represented by a few deeper punctures; frontal-plate indistinct, except at lower portion, usually with 2 small irregular and impunctate areas; genal pit sub-contiguous to lower lobe of eye; post-clypeus ridge-like, slightly depressed. Labrum before fold shorter than ante-clypeus; mandibles shiny, rugose-punctate, basal ridge distinct and short, moderately excavate inward, grooved outward; distal segment of maxillary palp with sides curved, slightly longer than last labial segment. Gular plate short, deeply grooved anteriorly, indistinctly punctate; ventral head area rugose, wrinkles smoothed medially. Posterior eye contours almost straight.

Antenna longer than body, scape basally scabrous punctate, punctures with elongate setae, gradually separating toward impunctate apex; segments 2+3 about 1.8 times 4th (exceptionally 1.6); 4 from 0.6 to 0.8 times 5th. Scars: dorsally, with a shorter than half on 6th, complete but usually interrupted on 7th; ventrally, shorter than half on 4th, complete on 5th, but interrupted medially.

Prothorax scabrose punctate, with a longitudinal median irregular impunctate area, usually with 2 pubescent spots, 1 at each side of disc (fig. 58). Prosternum semi-bulged (fig. 37), constricted anteriorly.

Elytra sub-coriaceus, punctures shallow, evenly distributed upon surface; dark dorsal vitta sub-parallel to dorso-elytral border on basal half, then forming a settiform pattern (fig. 22); lateral dark vittae reduced to post-humeral area, enclosing or not humeral apex. Elytral length approximately 3 times humeral distance; dorso-elytral border ending in a blunt point, in some specimens reduced to a tuberose angle. Scutellum sub-triangular, sides curved, pubescent at borders.

Legs: front femur not depressed basally, mid femur not attaining mesosternal border.

Metasternum shiny, pubescent at sides with few scattered setae; metasternal infolding separated from sterno-abdominal junction by a plane area.

Abdomen shiny, setose as metasternum, 7th sternite truncate.

Female: antenna almost as long as body, pronotum slightly less developed, 7th abdominal sternite usually rounded.

Distribution: Brazil (States of Bahia, Espirito Santo, Minas Gerais, Pernambuco, Rio de Janeiro, Santa Catarina, Sao Paulo).

Remarks and variation: An elongate species, readily identified by its proportions, elytral length 12-24mm (average specimen 16-18mm). The sharp settiform pattern seen in fig. 22 is not always so well-defined, but the sub-medial broadening is constant. The pronotum may have the pubescent spots wanting, and dorsal contours somewhat rounded.

Specimens examined: Brazil, State of Bahia, km 965 Estrada Rio-Bahia (1); State of Espirito Santo, Linhares (6), Matilde (1); State of Minas Gerais, Aguas Vermelhas (1), Teofilo Ottoni (6); State of Pernambuco, Jaboatao (1); State of Rio de Janeiro, Corcovado (6), Floresta da Tijuca (12), Represa Rio Grande (4), Ilha do Governador (1); State of Santa Catarina, Corupa (6), Joinville (2), S. Francisco (1), Taio (1); State of Sao Paulo, Jabaete (2), Nova Itanhoem (1), Peruibe (14).

Poeciloxestia signatipennis (Melzer, 1923), **new status**

Coleoxestia elegans var. *signatipennis,* Melzer 1923:5
Coleoxestia elegans var. *signatipennis,* Melzer 1927:151
Coleoxestia elegans var. *signatipennis,* Blackwelder 1946:561

Description: Very similar to *elegans,* differing by 1) presence in each elytron of a supra-medial dark spot variable in size, and by 2) the lateral margin of the elytra terminating in a blunt point or tubercle, always less developed than dorso-elytral terminal point (fig. 29).

Distribution: Brazil (States of Sao Paulo & Santa Catarina).

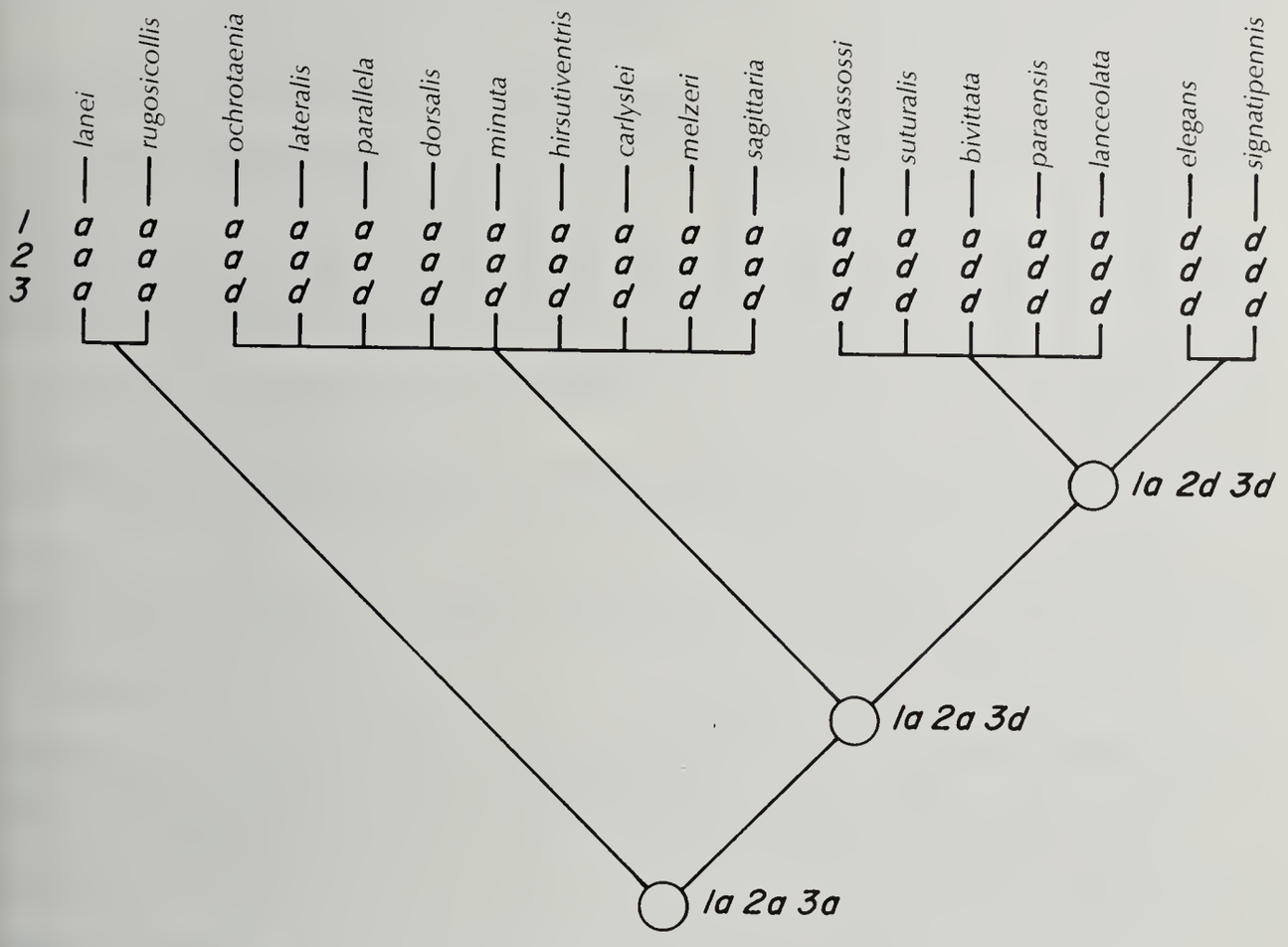

Fig. 238: *Poeciloxestia* hypothetical phylogeny.

Remarks and variation: Melzer described *signatipennis* as "n. var.", from Bosque da Saude, near the capital of Sao Paulo. All 11 specimens examined show the 2 identifying characteristics mentioned in the original description, and were collected in the same or nearby localities where *elegans* occurs. From the extensive series of *elegans* available, neither of the 2 mentioned characters were found singly, so *signatipennis* is hereby raised to full specific status.

Specimens examined: Brazil, State of Santa Catarina, Corupa (1), Rio Natal, 400m (1), Rio Vermelho (1); State of Sao Paulo, Boraceia (2), Cantareira (2), Itapera (1), Jabaquara (1).

Acknowledgements

This study was financially supported by EMBRAPA (Empresa Brasileira de Pesquisa Agropecuaria, Brazil), and was carried through at the facilities courteously provided by the Florida Department of Agriculture, Division of Plant Industry, Florida State Collection of Arthropods, Gainesville.

I am grateful for the personal cooperation of M. Alvarenga, G. E. Allen, B. Beck, C. A. Campos Seabra, D. L. Chambers, J. A. Chemsak, E. Fuchs, F. Lane, J. Macedo Filho, R. C. Marinoni, U. R. Martins, M. Monne, J. S. Moure, A. J. Owens, H. R. Pearson, T. E. Rogers, T. J. Spilman, H. Travassos and H. Wendt.

I am specially grateful to Dr. Robert E. Woodruff and Mrs. Thelma C. Carlysle, the only limit to whose kindness has been the reluctance I felt in taking their attention from more important matters.

Bibliography

Aurivillius, C. 1910. Neue oder wenig bekannte Coleoptera Longicornia 11. Ark. Zool. 7(3):1-44, fig. 48.

Aurivillius, C. 1912. Coleopterorum catalogus. 22(39):1-574. W. Junk, Berlin.

Bates, H. W. 1870. Contributions to an insect fauna of the Amazon Valley (Coleoptera—Cerambycidae). Trans. Ent. Soc. London 1870:243-335.

Bates, H. W. 1872. On the longicorn Coleoptera of Chontales, Nicaragua. Trans. Ent. Soc. London 1872:163-238.

Bates, H. W. 1880. Biologia Centrali-Americana (Insecta, Coleoptera, Longicornia). 5(2):17-19, illustr.

Blackwelder, R. E. 1946. Checklist of the Coleopterous insects of Mexico, Central America, the West Indies and South America. Bull. U.S. Nat. Mus. 185(4):551-764.

Blackwelder, R. E. 1957. loc. cit. 185(6):927-1492.

Blackwelder, R. E. 1967. Taxonomy. xiv + 698p., John Wiley & Sons Inc., N.Y.

Bruch, C. 1912. Catalogo sistematico de los Coleopteros de la Republica Argentina. Rev. Mus. La Plata (ser. 2) 6:174-226.

Buquet, J. B. L. 1852. Notice monographique sur le genre *Trachysomus*, de la tribe des lamiaires, suivi de la description de cinq especes nouvelles de *Criodions*. Ann. Soc. Ent. France (ser. 2) 10:349-358.

Dobzhansky, J. 1951. Genetics and the origin of species (3rd ed.): 364 p. Columbia Univ. Press, N.Y.

Ehara, S. 1954. Comparative anatomy of male genitalia in some Cerambycid beetles. Jour. Fac. Sci. Hokkaido Univ. (ser. 6) 12(1-2):61-115, 199 fig.

ERICHSON, W. F. 1847. Conspectus Insectorum Coleopterorum quae in Republica Peruana observata sunt. Archiv. fur Naturg. 13:67-185.

FABRICIUS, J. C. 1801. Systema Eleutheratorum secundus ordines, genera, species: adiectis synonymis, locis, observationibus, descriptionibus. (Cerambycidae 2:257-374)—Imprensis bibliopolii Academici Novi, Liliae.

FRAGOSO, S. A. 1970. Primeira nota preliminar a uma futura revisao dos Cerambycini Neotropicais. Atas Soc. Biol. Rio de Janeiro 14(3-4):97-101, 9 fig.

FRAGOSO, S. A. 1971. Segunda nota preliminar a uma futura revisao dos Cerambycini Neotropicais. Atas Soc. Biol. Rio de Janeiro 15(1):7-9, 10 fig.

GAHAN, C. J. 1892. Notes on longicorn Coleoptera of the group Cerambycinae, with descriptions of new genera & species. Ann. Mag. Nat. Hist. (ser. 6) 9(6):19-32.

GEMMINGER, M., AND B. VON HAROLD. 1872. Catalogus Coleopterorum hucusque descriptorum, synonymicus et systematicus (Prioninae & Cerambycinae). 9:2751-2988, Sumptu E. H. Gummi (G. Beck), Monachii.

GORY, H. L. 1832. *9. Description de l'*Hammaticherus suturalis*. Guerin Magas. Zool., pl. 2, Ins. no. 1, 1 pl.

GORY, H. L. 1833. *21. Description du *Xestia elegans*. Guerin Magas. Zool., pl. 3, Ins. no. 64, 1 pl.

HENNIG, W. 1966. Phylogenetic systematics. 268p, 69 fig. Univ. of Illinois Press, Chicago.

HINTON, H. E. 1970. Some little known surface structures. Insect ultrastructure. Symposia Royal Ent. Soc. London 5:41-58. 29 fig.

HORN, W., AND S. SCHENKLING. 1928. Index Litteraturae Entomologicae Serie 1: Die Welt-Literatur uber die gesamte Entomologie bis inklusive 1863. Band III, p. 705-1056, 1 pl., Selbstverlag von Dr. Walther Horn, Berlin.

IUGA, V. G., AND A. ROSCA. 1962. La morphologie de l'apex abdominal chez les Cerambycidae (Col.) compare a celui des Hymenopteres. Trav. Mus. Hist. Nat. Grigore Antipa 3:101-156, 54 fig.

IUGA, V. G., AND A. K. KONNERTH. 1963. La structure de l'apex abdominal chez les Halticinae comparee a celle des Cerambycidae (Col.). Trav. Mus. Hist. Nat. Grigore Antipa 4:201-216, 12 fig.

IUGA, V. 1965. Sur deux modalites differentes de metamorphose chez les insects holometaboles a ovipositeur. Trav. Mus. Hist. Nat. Grigore Antipa 5:209-224, 5 fig.

IUGA, V., AND A. ROSCA. 1966. Morphologie du sommet abdominal des caraboides, compare a celui des Coleopteres avec ovipositeur. Trav. Mus. Hist. Nat. Grigore Antipa 6:171-226, 38 fig.

JEANNEL, R. 1955. L'edeage: initiation aux recherches sur la systematique des coleopteres. Publ. Mus. Nat. Hist. Nat. 16:1-155, 93 fig.

LACORDAIRE, J. T. 1869. Genera des Coleopteres. 8:1-552, 134 pl., Paris.

LANE, F. 1965. Cerambycoidea Neotropica Nova VI (Coleoptera). Studia Ent. 8(1-4):269-336.

LINSLEY, E. G. 1961. The Cerambycidae of North America (Introduction). Univ. California Publ. Ent. 18:1-135.

MARTINS, U. R. 1971. Monografia da tribu Ibidionini. Arq. Zool. S. Paulo 16(6):1343-1508.

MARTINS, U. R. 1976. Sistematica e evoluçao da tribo Piezocerini (Col. Ceramb.). Arq. Zool. S. Paulo 27(3-4):165-370, 8 pl.

MATSUDA, R. 1965. Morphology and evolution of the insect head. Mem. Amer. Ent. Inst. 4:1-334, 111 fig., 8 tables.

MAYR, E., E. G. LINSLEY, AND R. L. USINGER. 1953. Methods and principles of systematic zoology. ix+336p, 45 fig., 14 tables. McGraw-Hill, N.Y.

MAYR, E. 1961. Principles of systematic zoology. xi+428, illustr., McGraw-Hill, N.Y.

MAYR, E. 1963. Populations, species and evolution, xv+453p., Harvard Univ., Belknap Press.

MELZER, J. 1923. Longicorneos do Brasil novos ou pouco conhecidos. Not. Prel. Mus. Paulista 2(4):1-10.

MELZER, J. 1927. Longicorneos do Brasil, novos ou pouco conhecidos. Rev. Mus. Paulista 15(1):135-202, pl. 11.

NEWMAN, E. 1838. Entomological notes. Ent. Mag. 5:372-402.

PERELI, V. 1954. Macro-micro-photographie. 531p, 234 fig., Ed. Progresso Fotografico, Milan.

PERTY, J. A. M. 1832. (fasc. II)—Delectus animalium articulatorum, quae in itinere per Brasiliam annis MDCCXVII-MDCCXX jussu et auspiciis Maximiliani Josephi I Bavariae Regis augustissimi peracto collegerunt Dr. J. B. de Spix et Dr. C. F. Ph. de Martius. 2:61-124, 40 pl., Monachii (Fasc. 1:1-60 was publ. 1830).

ROSS, H. H. 1974. Biological systematics. 345p., illustr. Addison Wesley Publ. Reading, Mass.

SERVILLE, J. G. A. 1834. Nouvelle classification de la famille des Longicornes (suite). Ann. Soc. Ent. France (ser. I) 3:5-110.

SHARP, D., AND F. MUIR. 1912. The comparative anatomy of the male genital tube in Coleoptera: Part III (Dec.). Trans. Ent. Soc. London 1912:477-642, pl. 43-78, 239 fig.

SNODGRASS, R. E. 1931. Morphology of the insect abdomen. Part I: General structure of the abdomen and its appendages. Smithsonian Misc. Coll. 85(6):1-178, 44 fig.

SNODGRASS, R. E. 1935. Principles of insect morphology. ix+667p, 319 fig. McGraw Hill, New York, N.Y.

THOMSON, J. 1860. Essai d'une classification de la famille des Cerambycides et materiaux pour ,sevir a une monographie de cette famille. 104p, 3 pl., Paris.

THOMSON, J. 1873. Type Cerambycidarum Musei Thomsoniani III—Table methodique des types de cerambycides et sub-cerambycides qui existent actuellement dans la collection Thomson. 4-20p, E. Deyrolle, Paris.

TIPPMANN, F. F. 1960. Studien uber Neotropishe Longicornier III. Koleopterologishe Rundschau 37-38(1-6):82-217, 14 pl.

TORRE BUENO, J. R. 1939. A glossary of entomology. ix+336p., 4 pl. Brooklyn Ent. Soc., N.Y.

TUXEN, S. L. 1970. Taxonomist's glossary of genitalia in insects (2nd ed.). 359p., illustr., S-H Service Agency Inc., Conn.

WHITE, A. 1853. Catalogue of coleopterous insects in the collection of the British Museum (Longicornia I). 8:1-174, 4 pl., London.

WHITE, M. J. D. 1968. Models of speciation. Science 159:1065-1070.

WILSON, J. T. 1972. Continents adrift (Readings from Scientific American). 172p., illustr. W. H. Freeman & Co., S. Francisco, Calif.

WOODRUFF, R. E. 1975. The scarab beetles of Florida. Arthropods of Florida (Fla. Dept. of Agric. & Consumer Services, Division of Plant Industry) 8:xi+220, 407 fig.

ZAJCIW, D. 1966. Estudo do Genero *Brasilianus* Jacobson, 1924. Rev. Bras. Biol. 26(1):47-58, 6 fig.

ZAJCIW, D. 1967. Novos longicorneos neotropicos XIII. Mem. Inst. Oswaldo Cruz 65(2):197-204, 3 fig.